

1/38

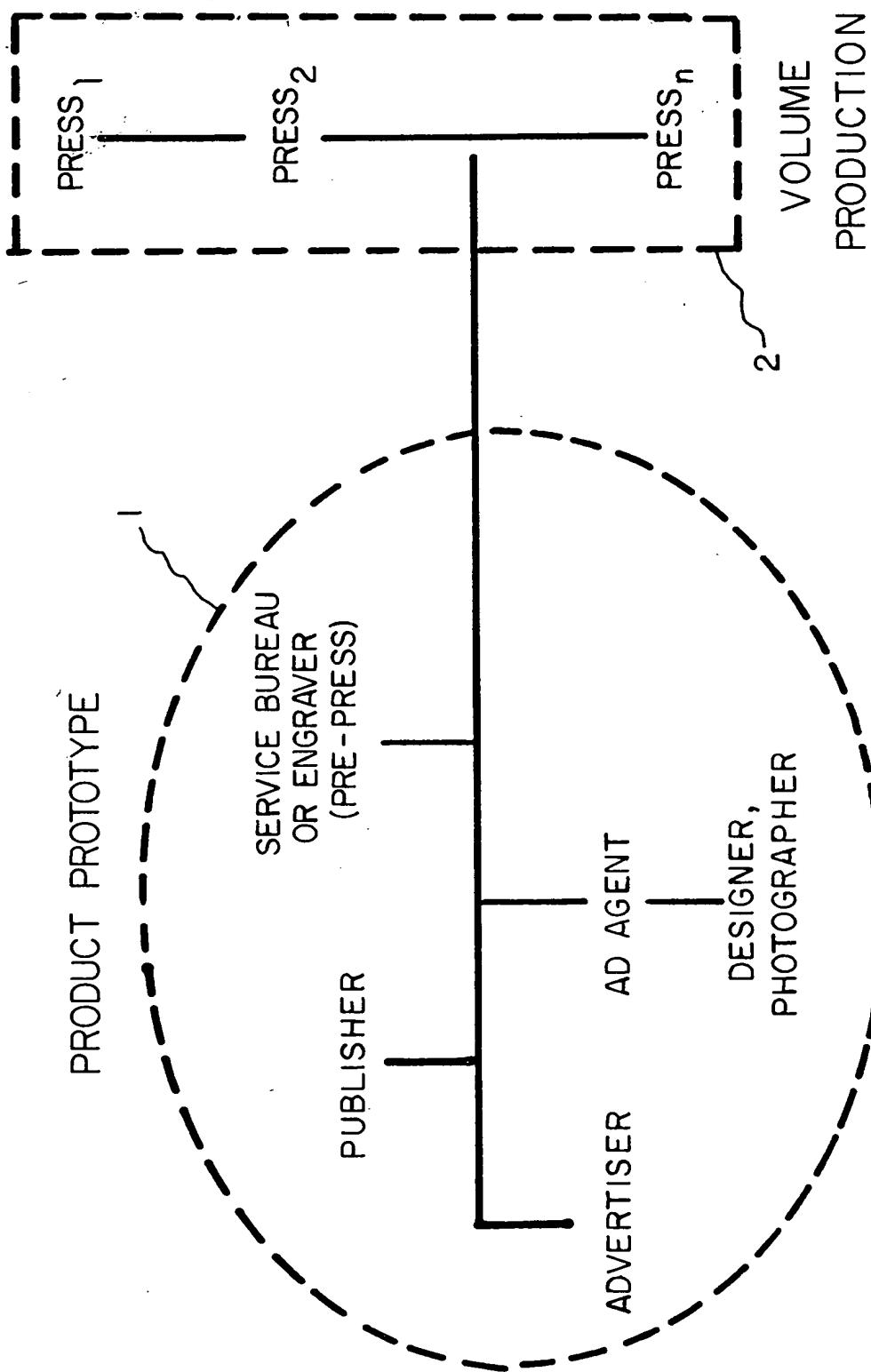
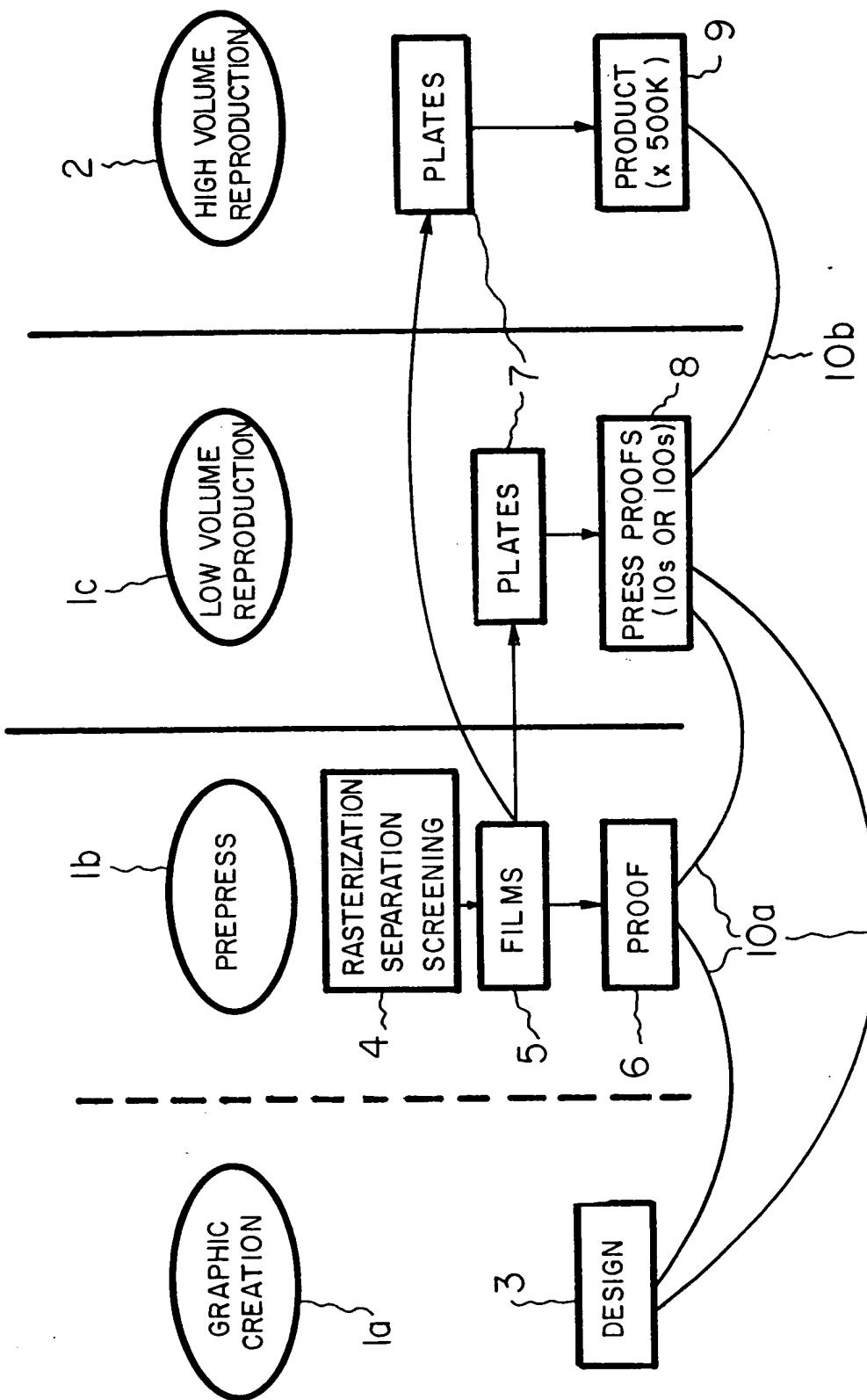
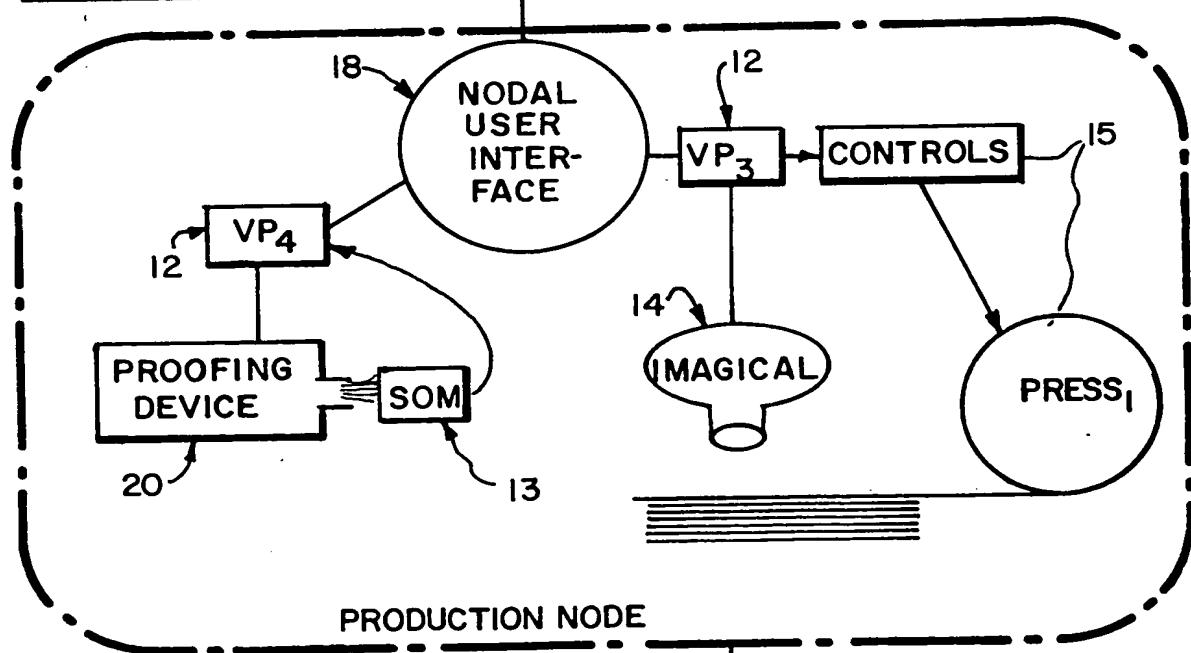
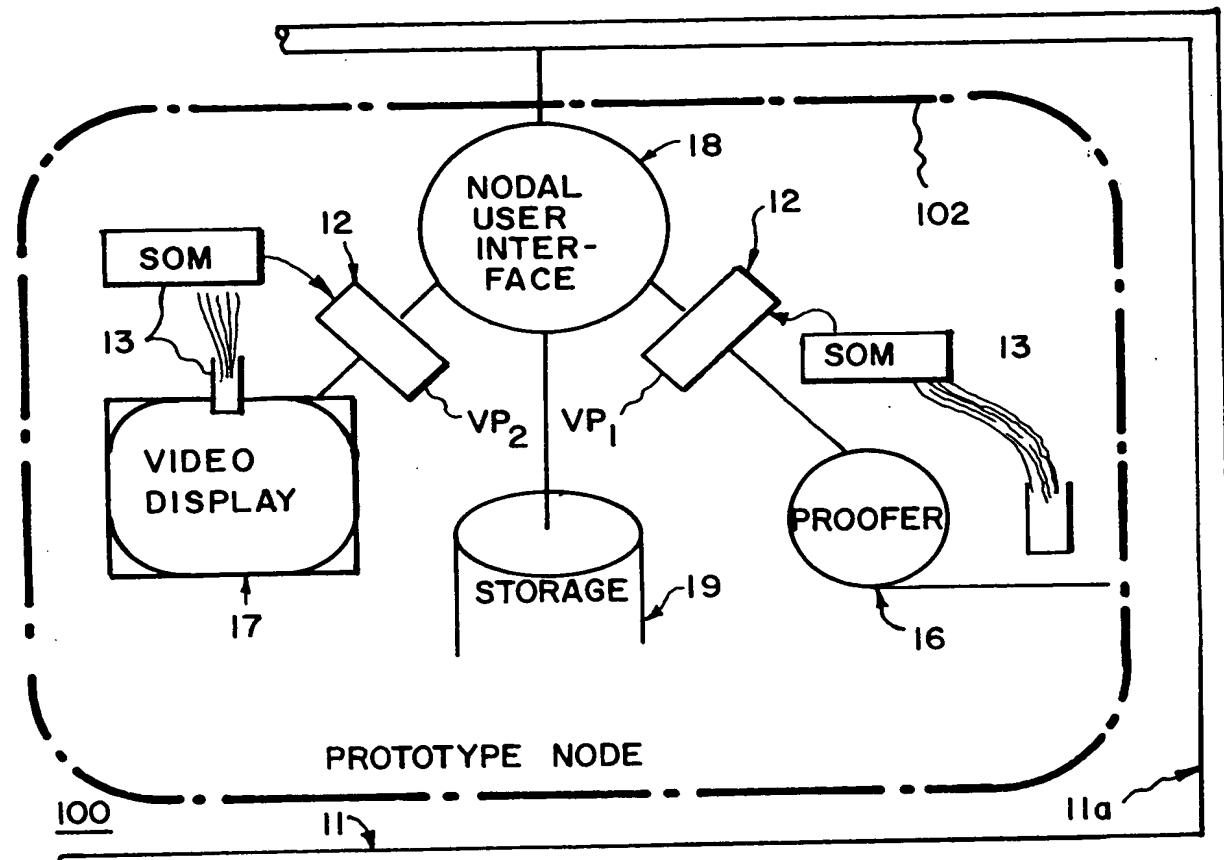
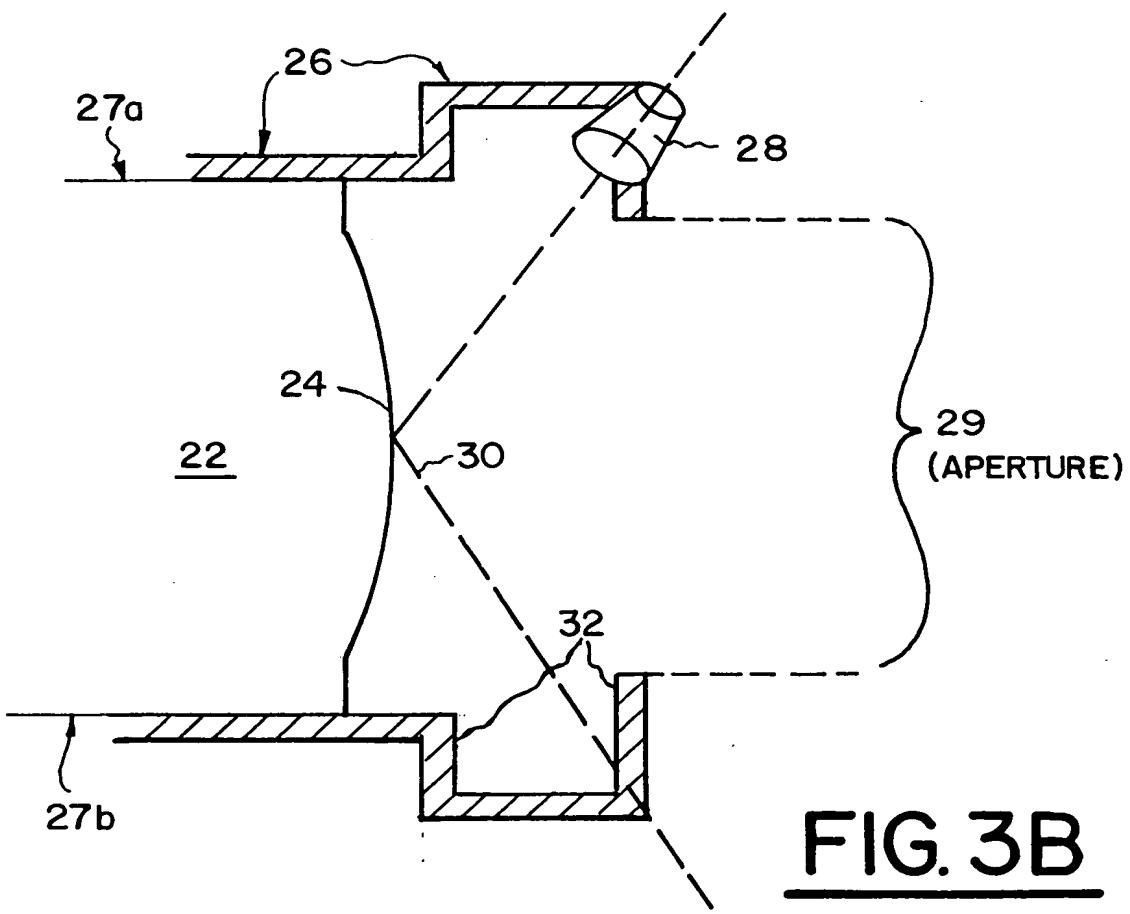
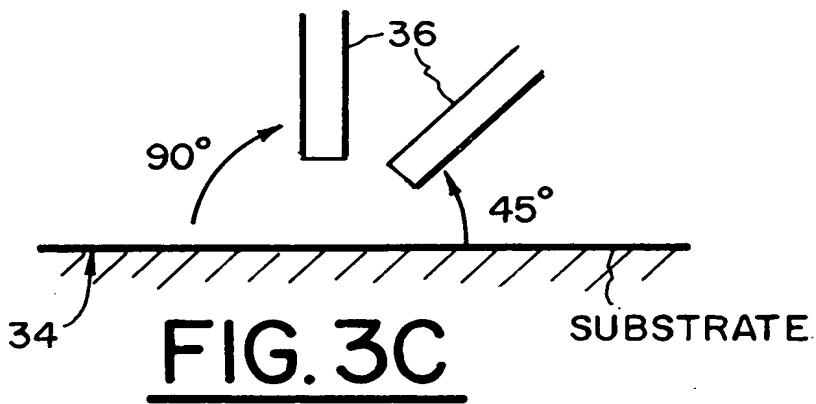


FIG. I

FIG. 2



**FIG. 3A**



5/38

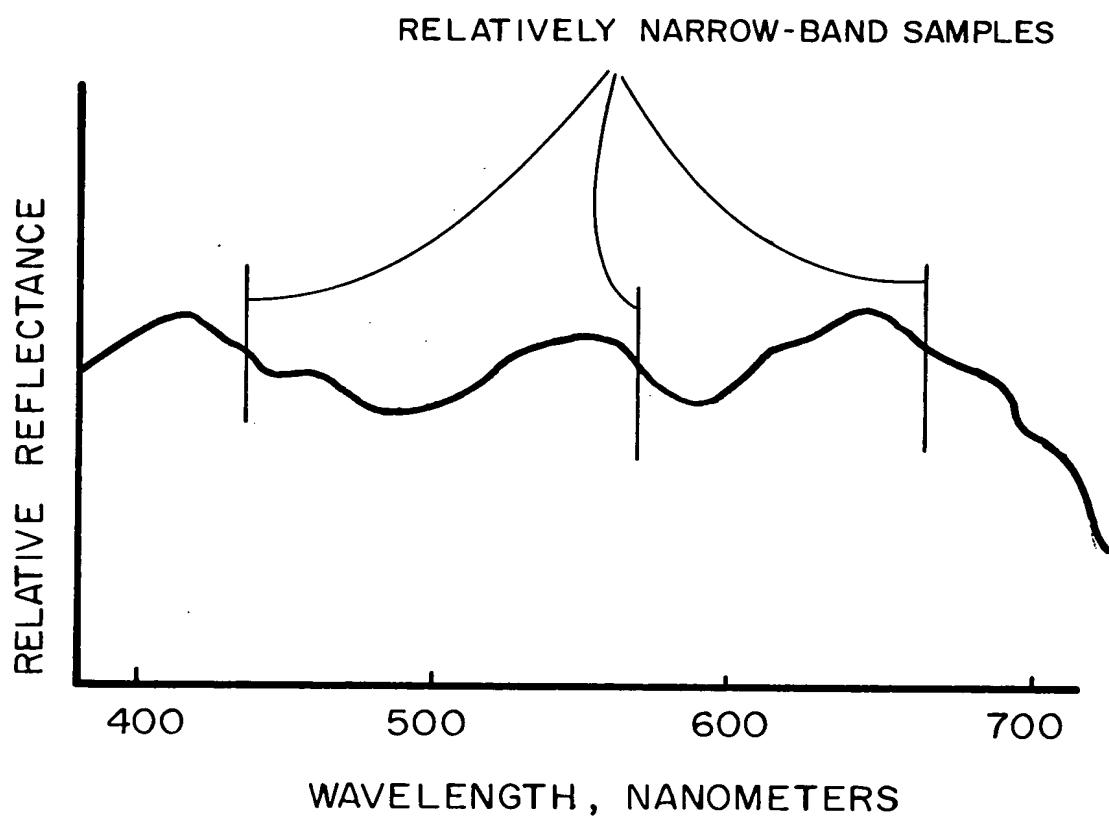
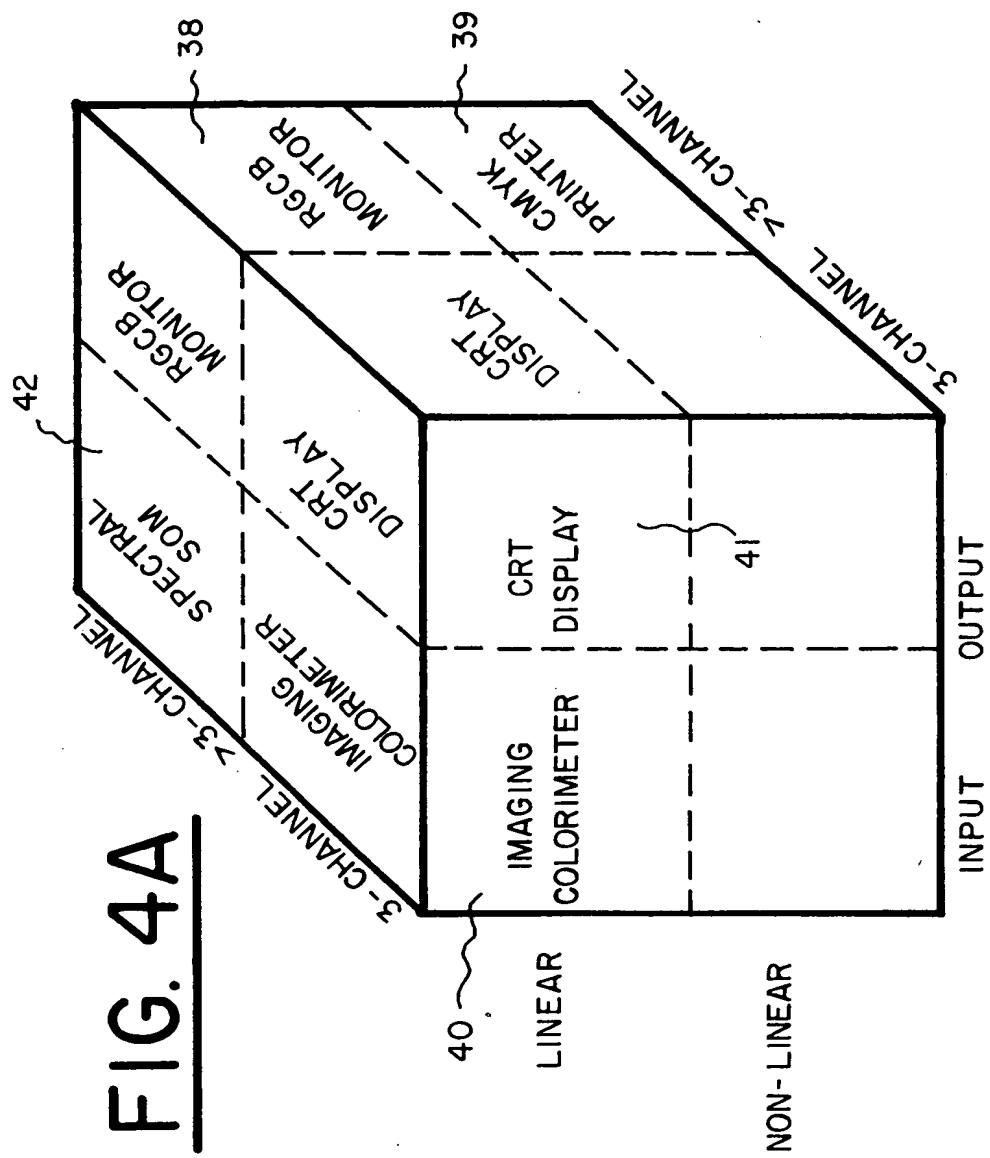
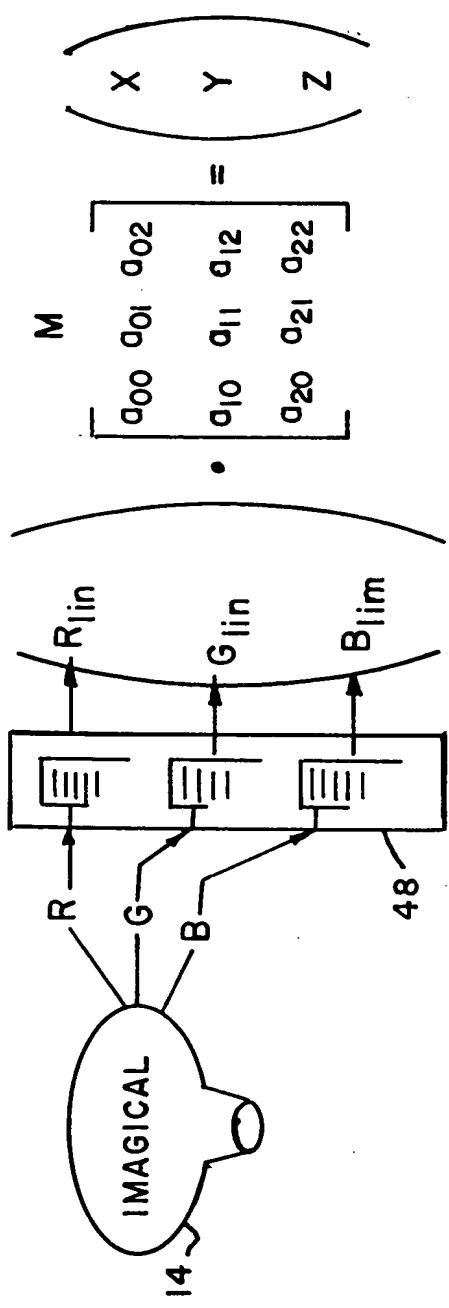
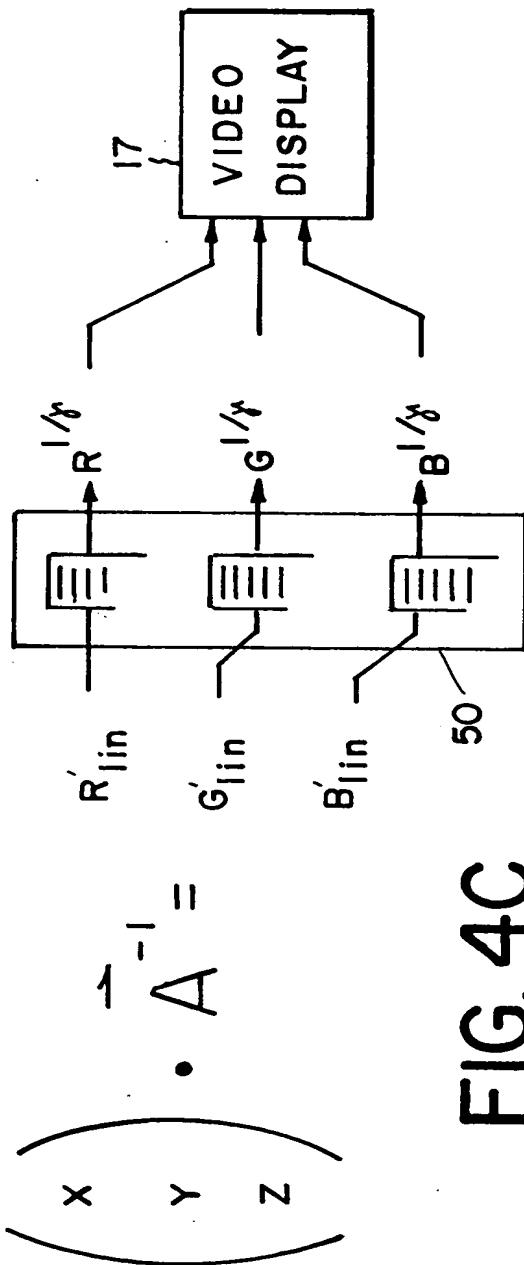
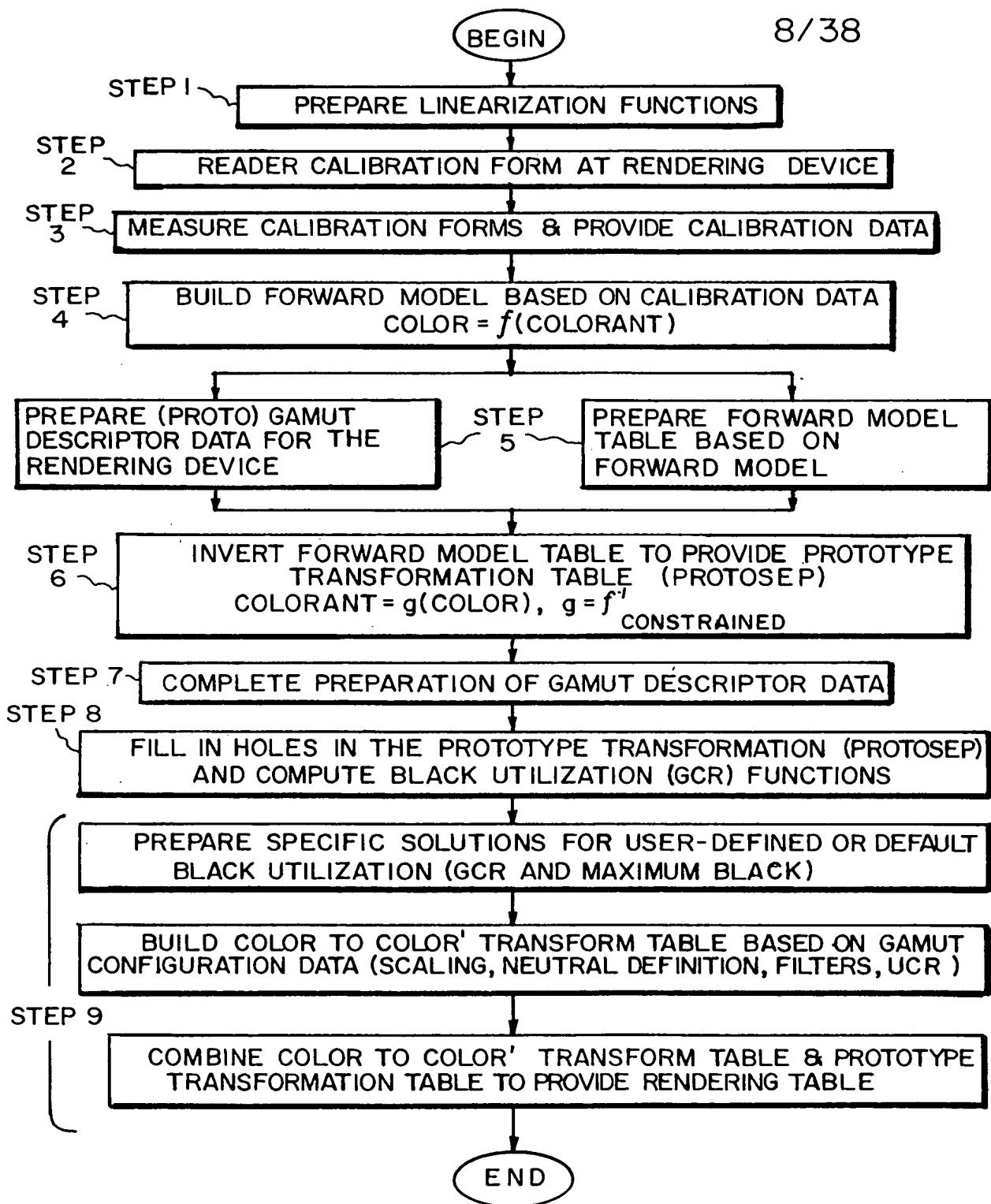


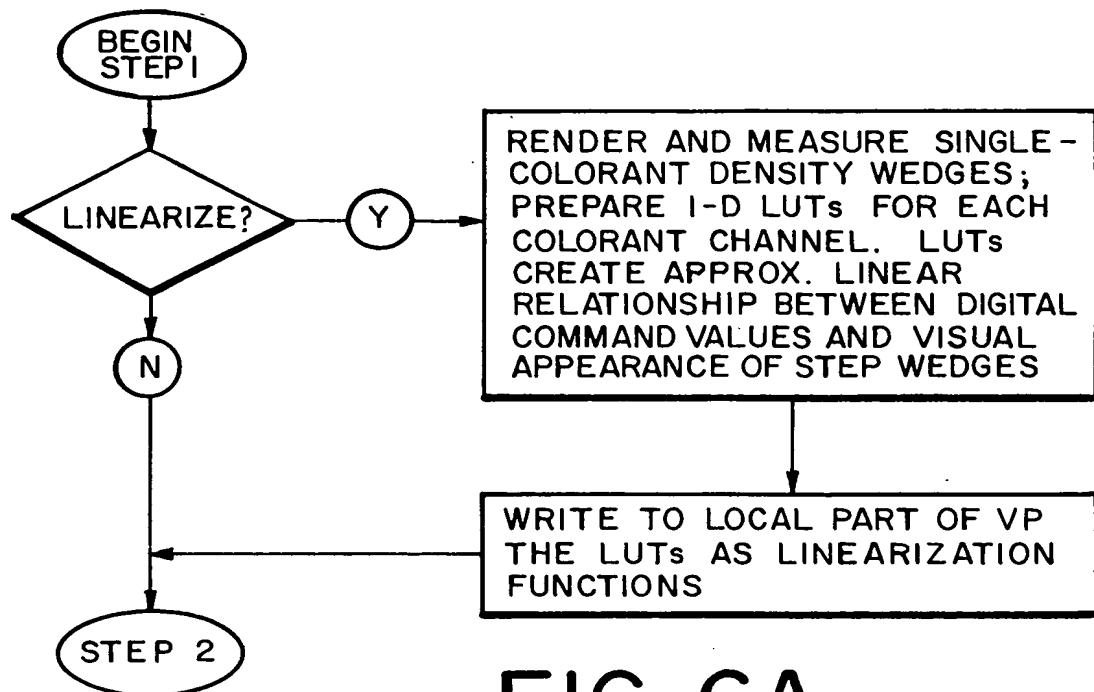
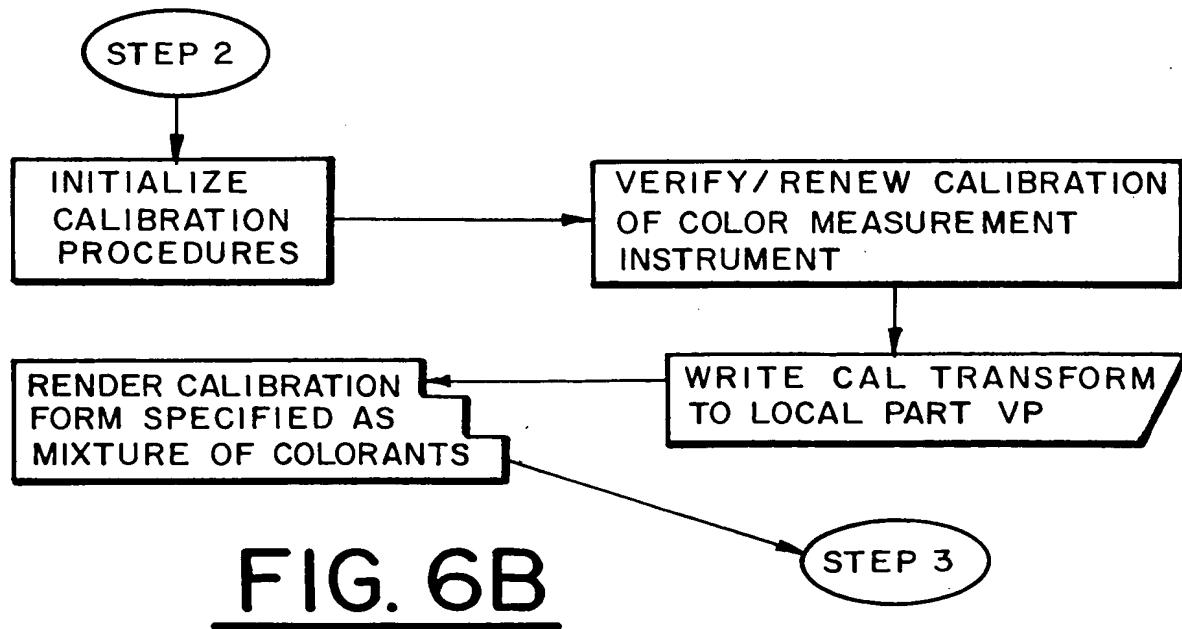
FIG. 3D

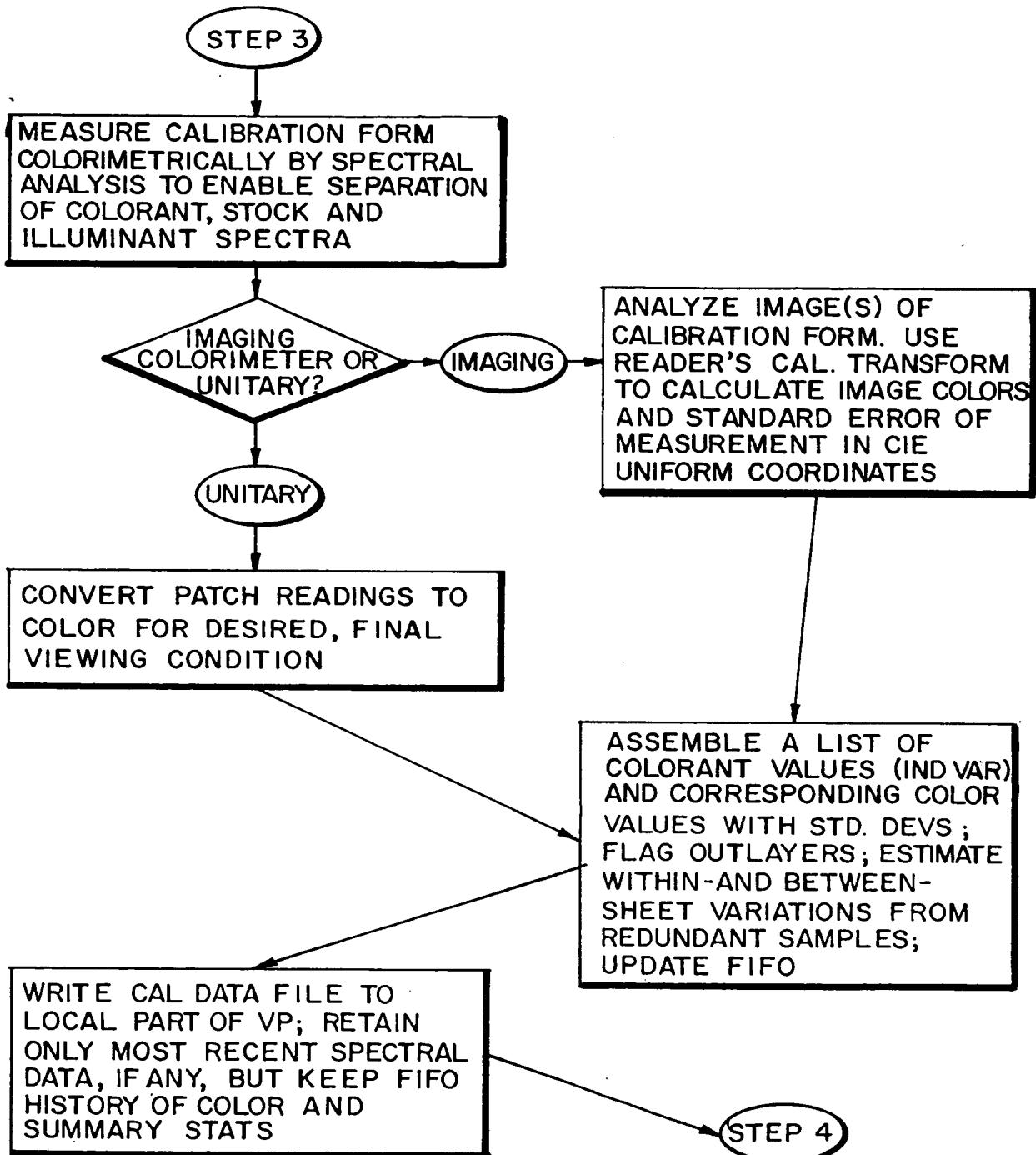


**FIG. 4A**

FIG. 4BFIG. 4C

**FIG. 5**

**FIG. 6A****FIG. 6B**

**FIG. 7**

11/38

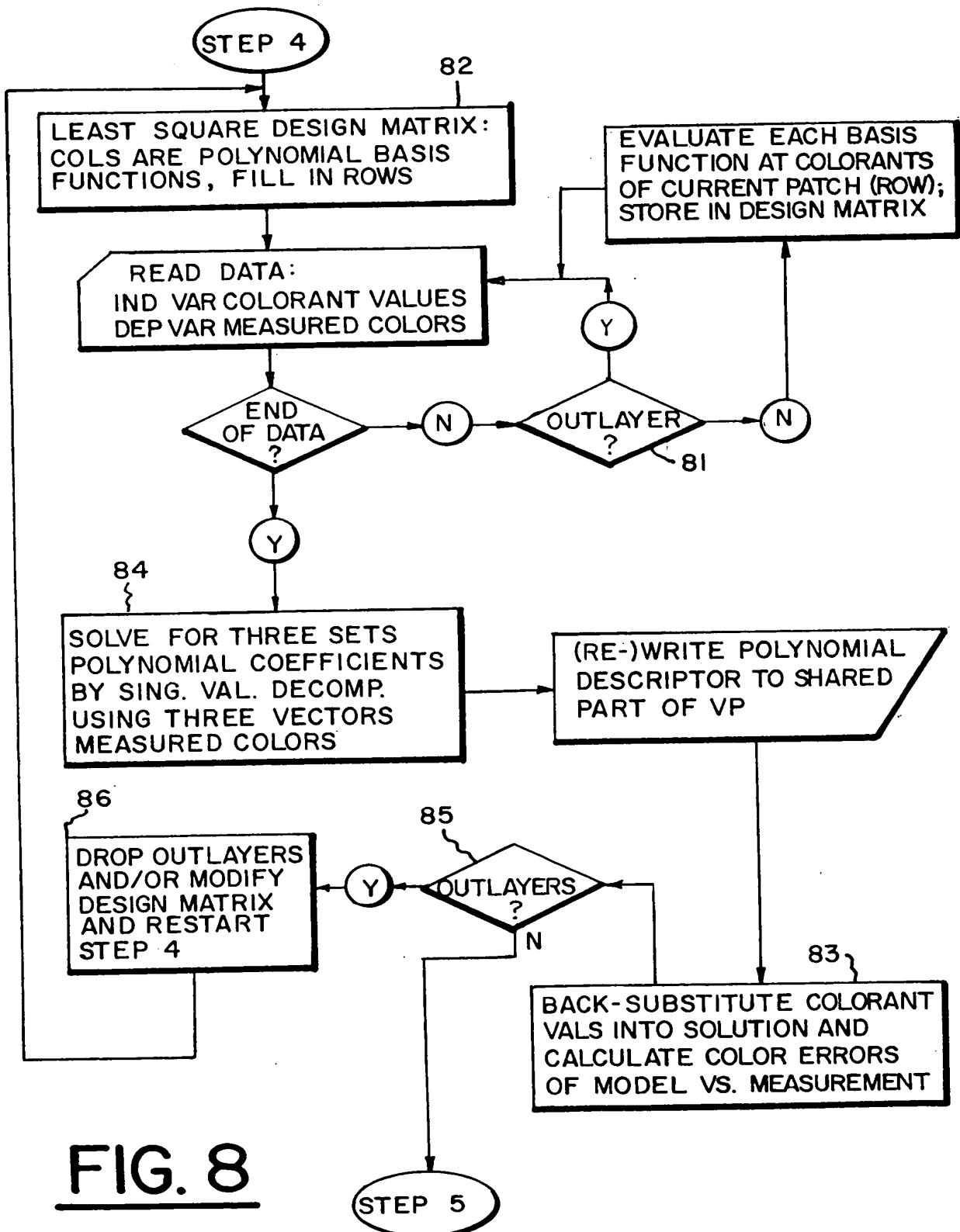


FIG. 8

12/38

STEP 5

PREPARE FORWARD MODEL INTERPOLATION TABLE AND PROTOTYPE GAMUT DESCRIPTOR; FOR FMT, DEFINE I-D INPUT AND OUTPUT CONDITIONING LUTs AND COLORANT QUANTIZATION/ADDRESSING SCHEME; FOR PGD, DEFINE CYL. COORD. QUANT. SCHEME

DO NESTED LOOPING OVER ALL COLORANT ADDRESSES AND COMPUTE COLORS WITH FORWARD MODEL FROM STEP 4

~97

STORE COLORS IN CARTESIAN COORDINATES IN COLORANT-TO-COLOR TABLE (FMT)

BUILD PROTO-GAMUT-DESCRIPTOR: STORE COLORS IN CYLINDRICAL COORDINATES; MAKE LINKED LISTS OF CHROMA VALUES OCCURRING AT EACH QUANTIZED HUE ANGLE / LIGHTNESS COORDINATE

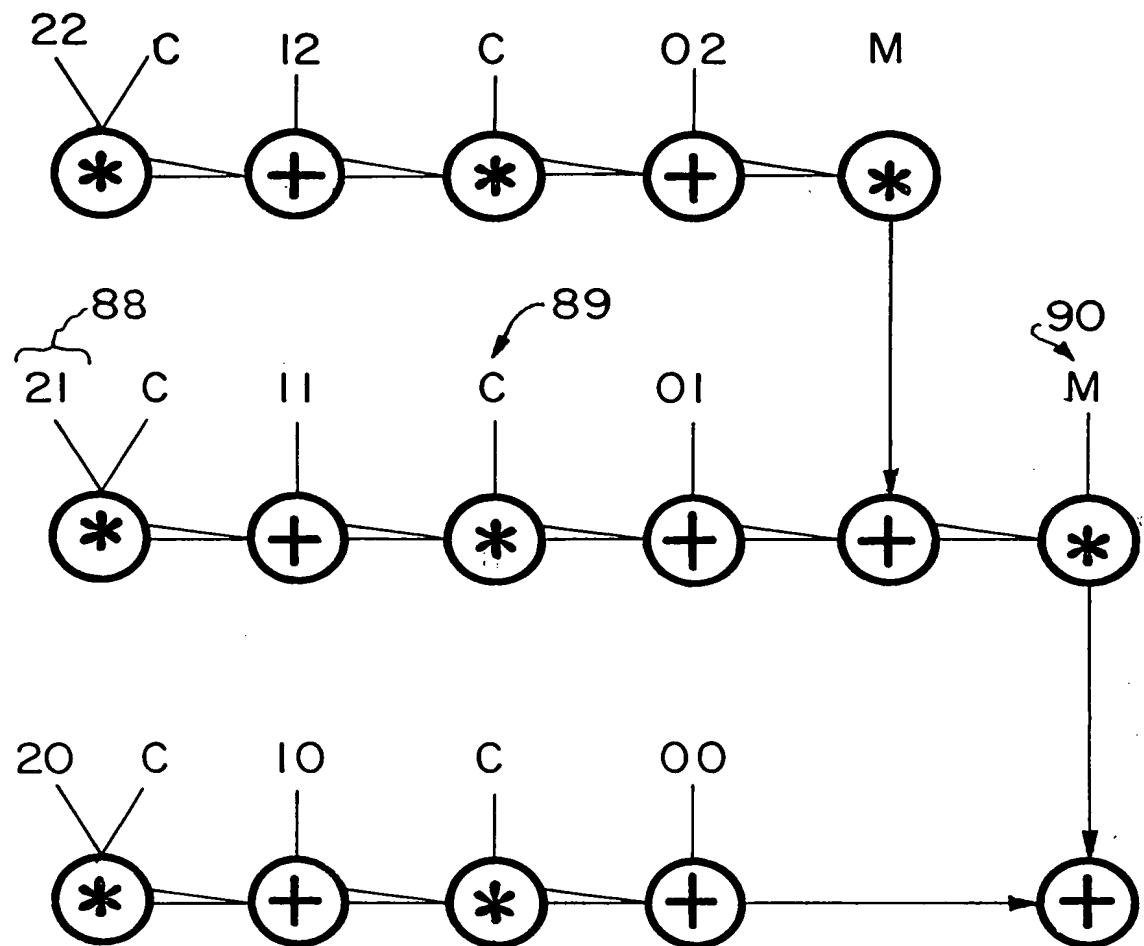
99

WRITE TO SHARED PART OF VP

WRITE TO LOCAL PART OF VP

STEP 6

FIG. 9A



\* = MULTIPLY 86

+ = ACCUMULATE 87

**FIG. 9B**

14/38

© 1996 John Wiley & Sons, Inc.

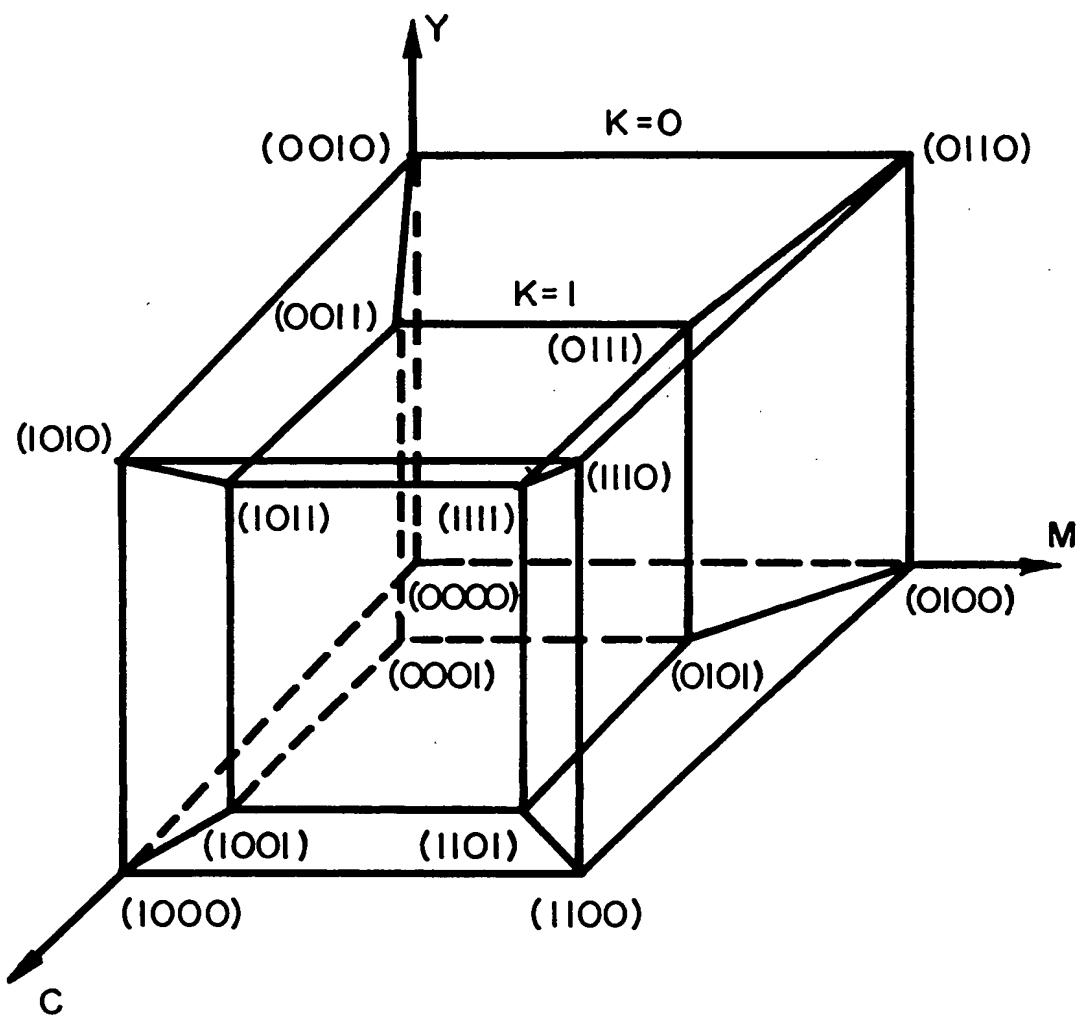
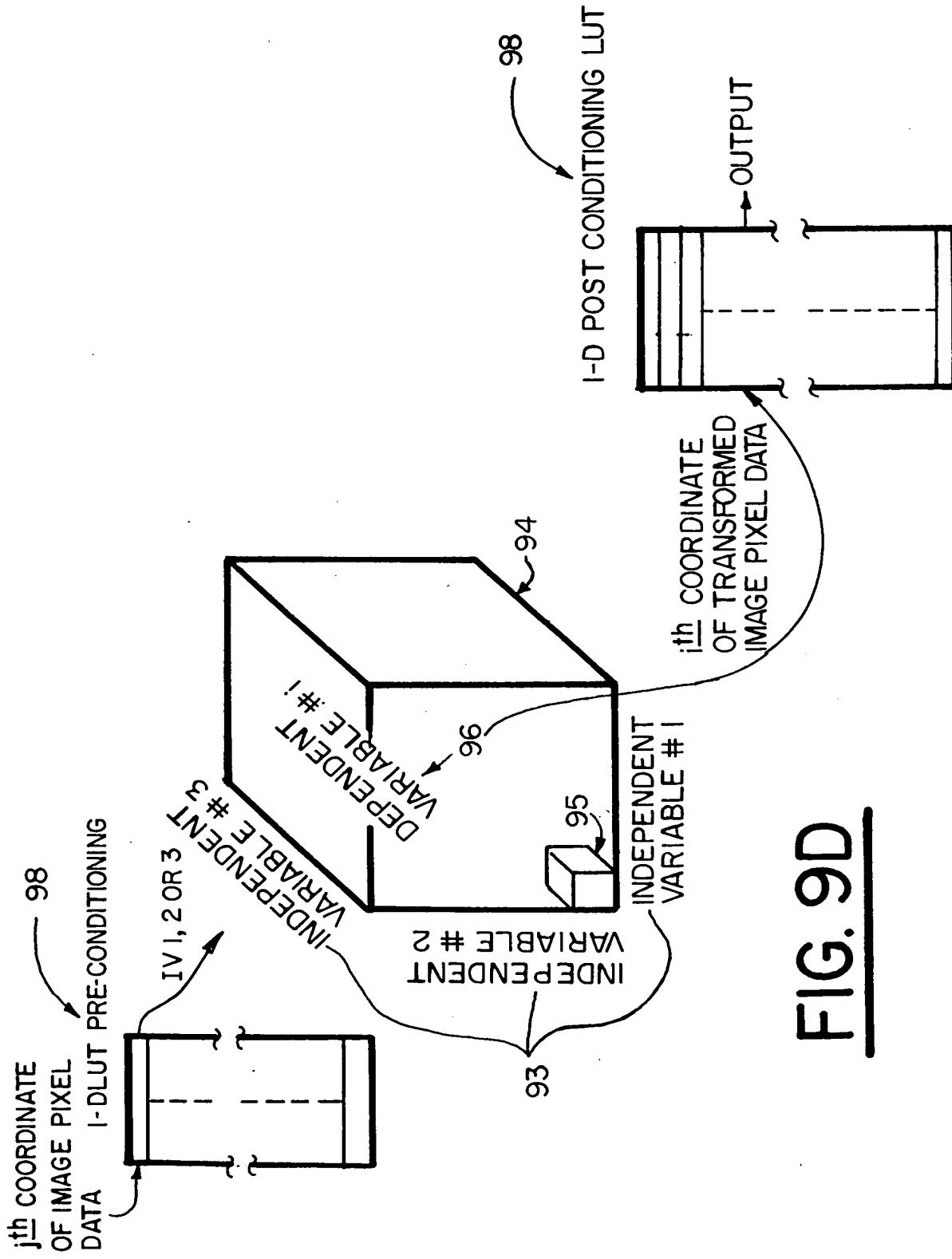


FIG. 9C

**FIG. 9D**

16/38

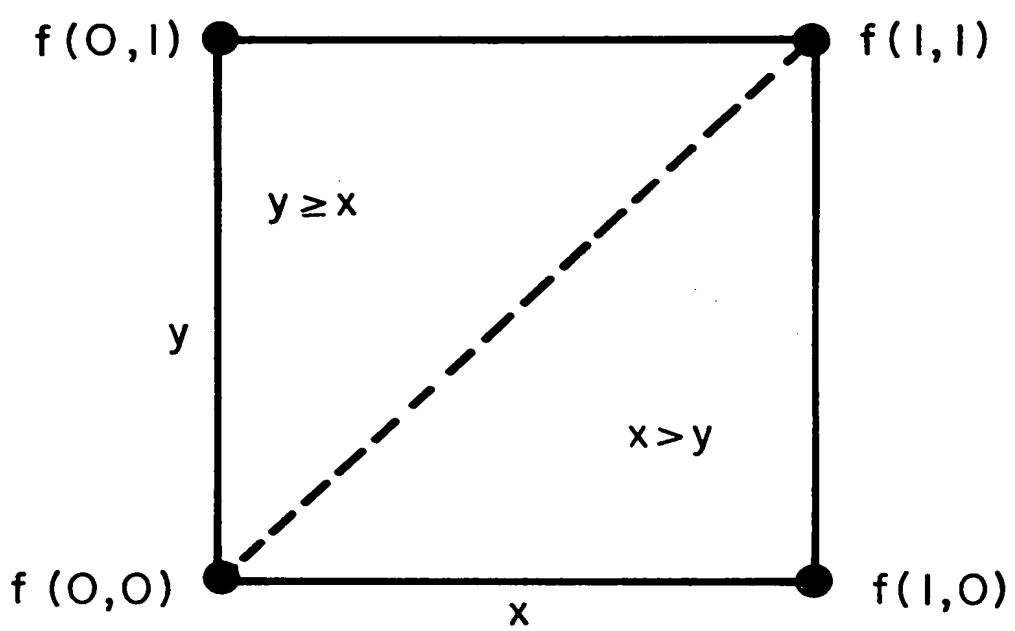
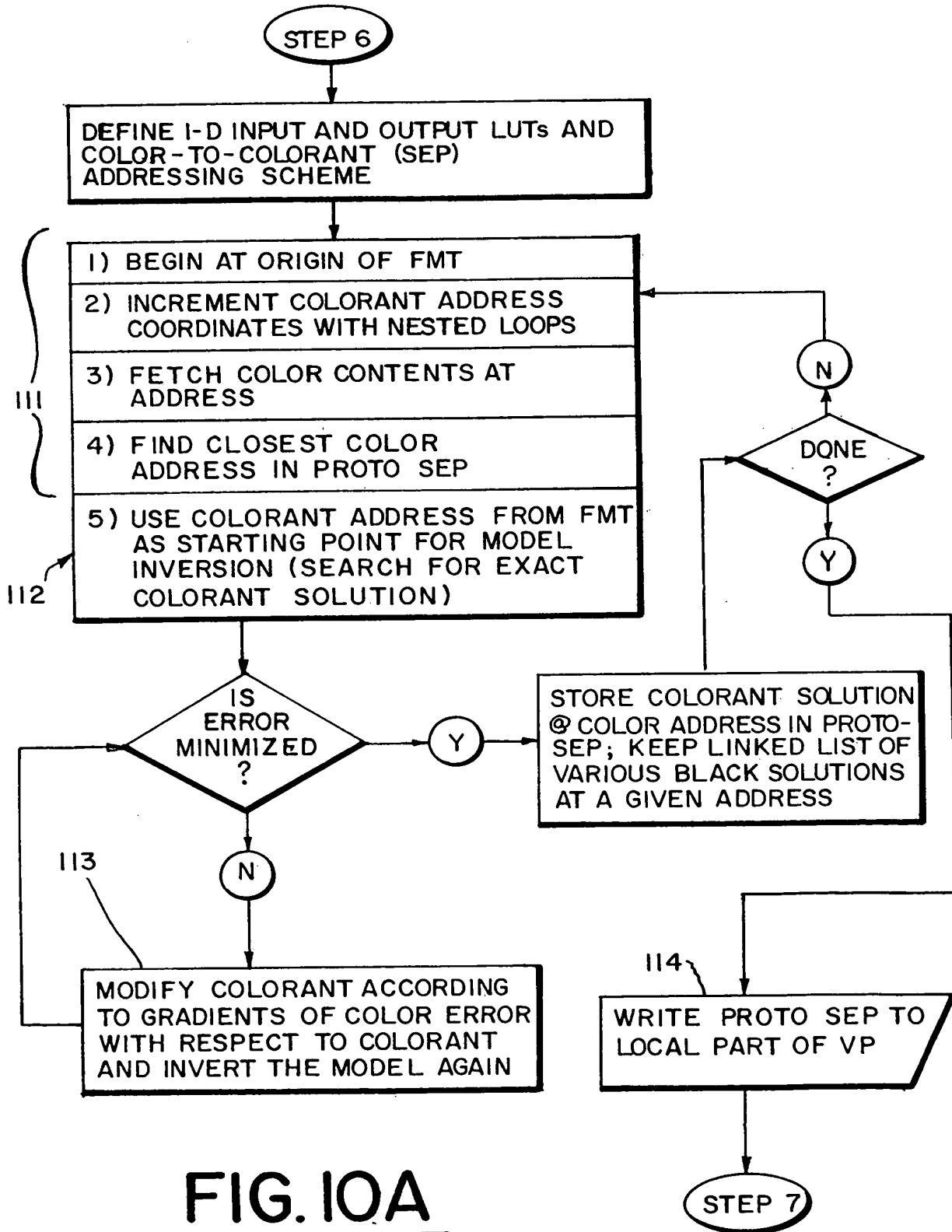


FIG. 9E

**FIG. 10A**

18/38

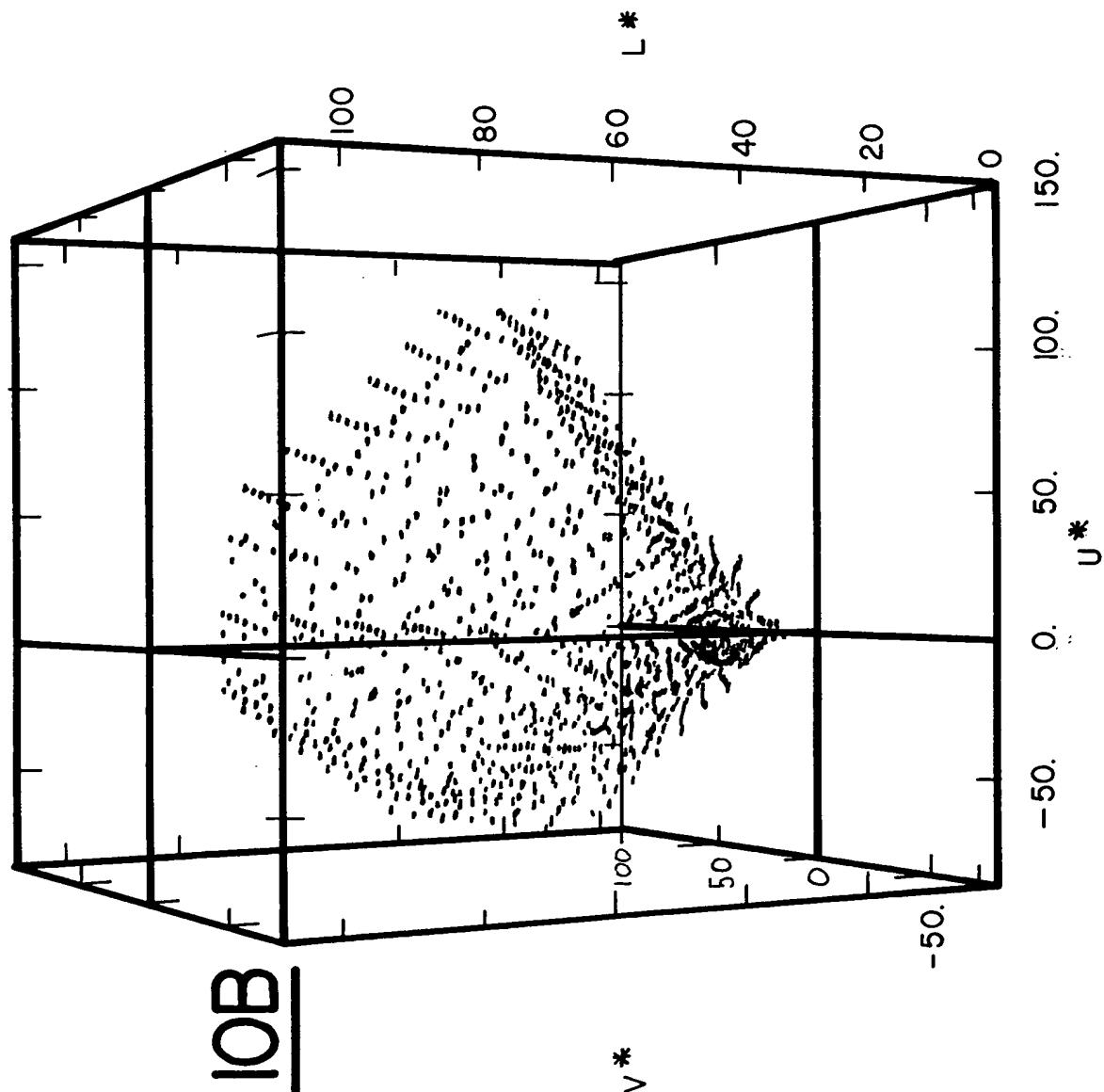
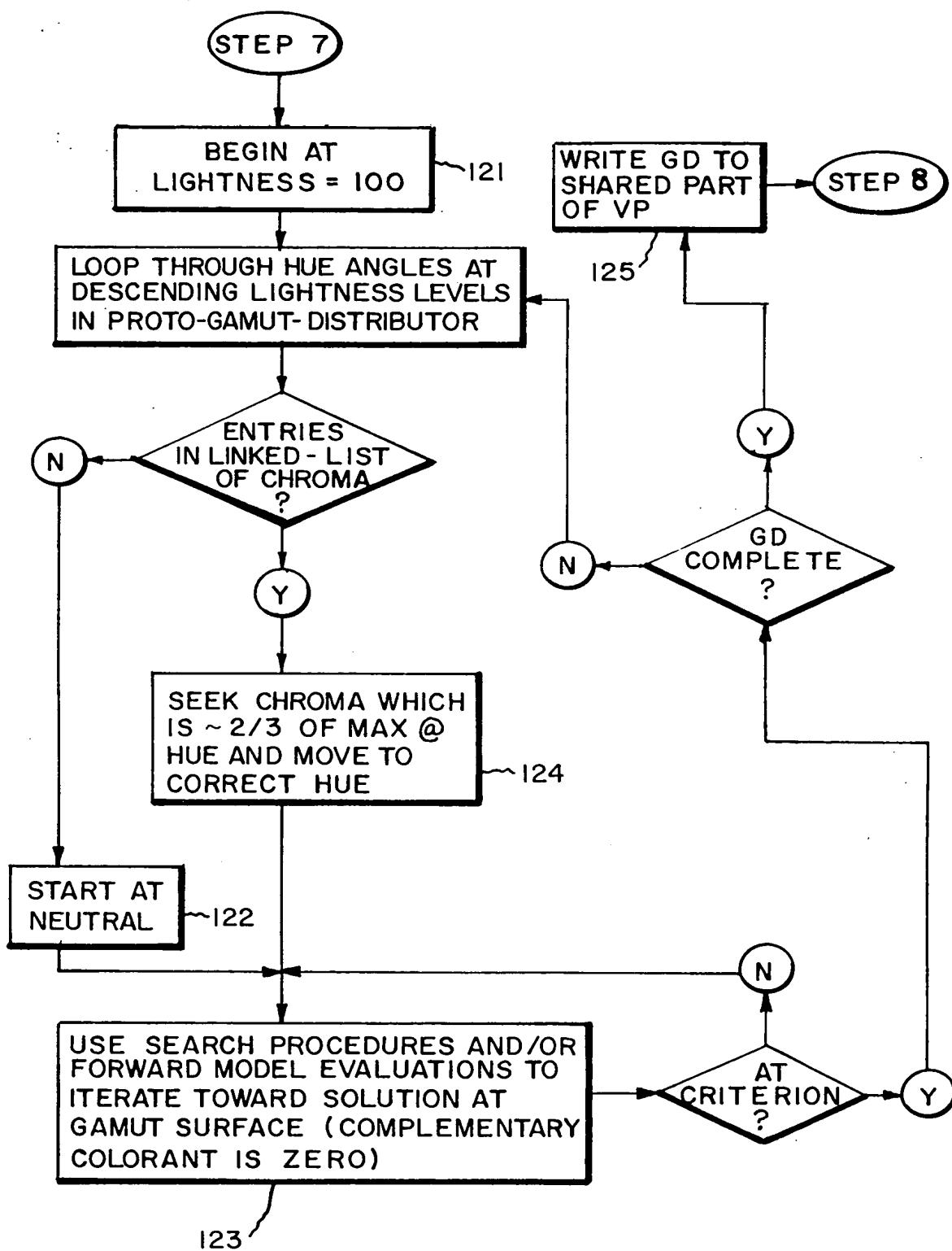
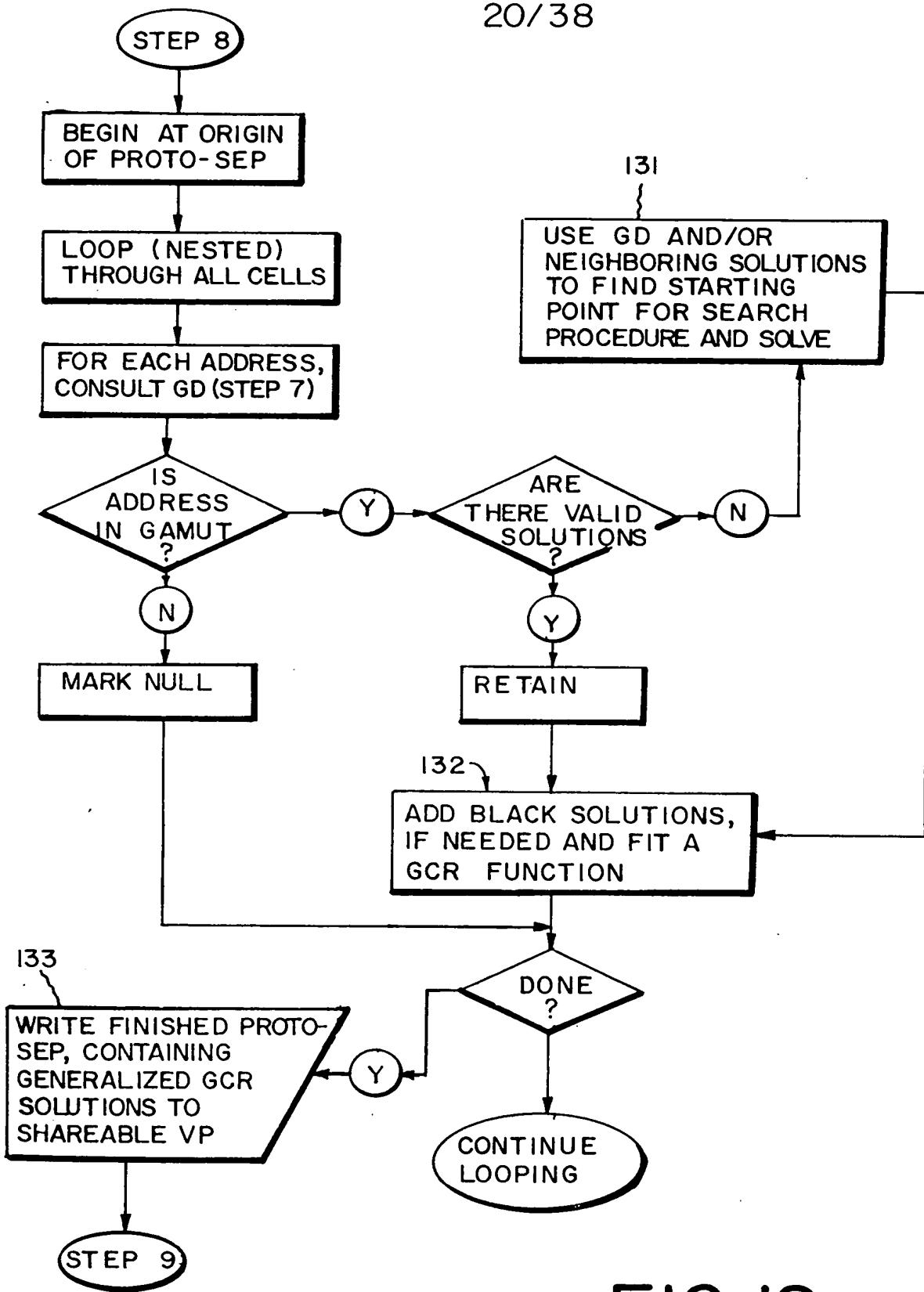
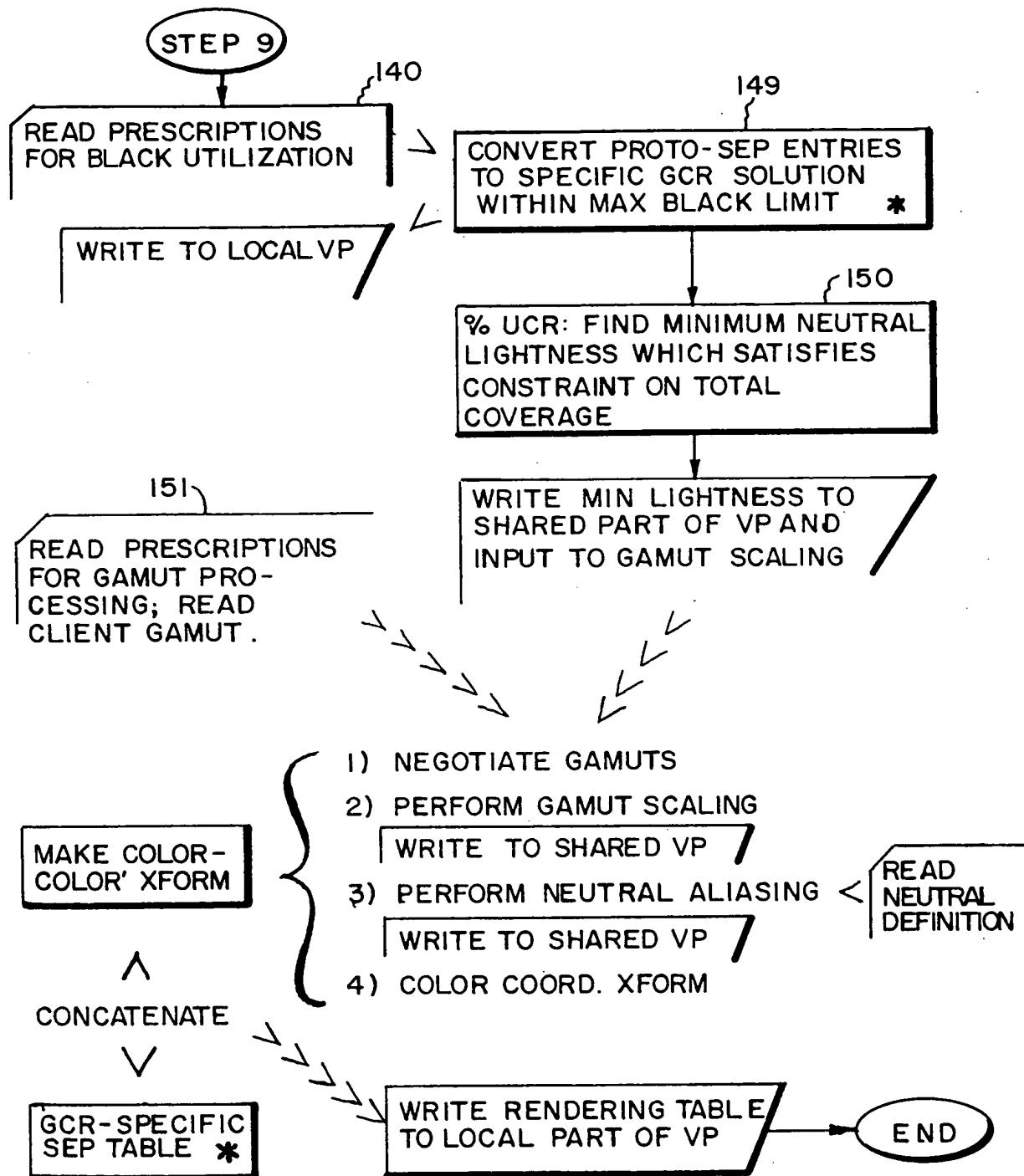


FIG. 10B

FIG. II

FIG. 12

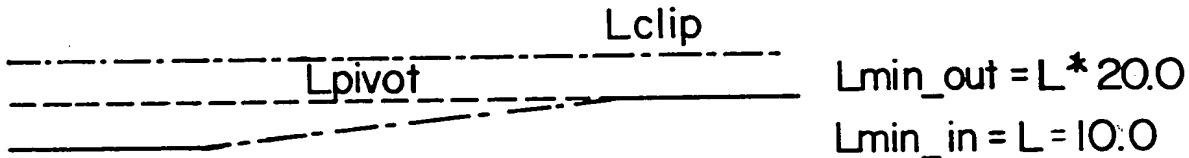
FIG. 13

CASE 1: THE MINIMUM INPUT  $L^*$  IS LESS THAN  
MINIMUM OUTPUT  $L^*$

---

$L^* = 100.0$

$$L^*_{out} = L^*_{in}$$



CASE 2: THE MINIMUM INPUT  $L^*$  IS GREATER THAN  
MINIMUM OUTPUT  $L^*$

---

$L^* = 100.0$

$$L^*_{out} = L^*_{in}$$

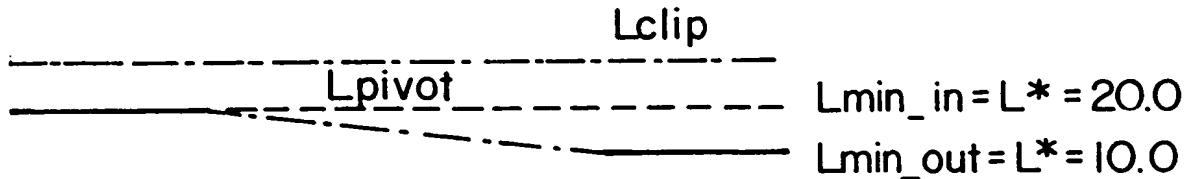


FIG. 14

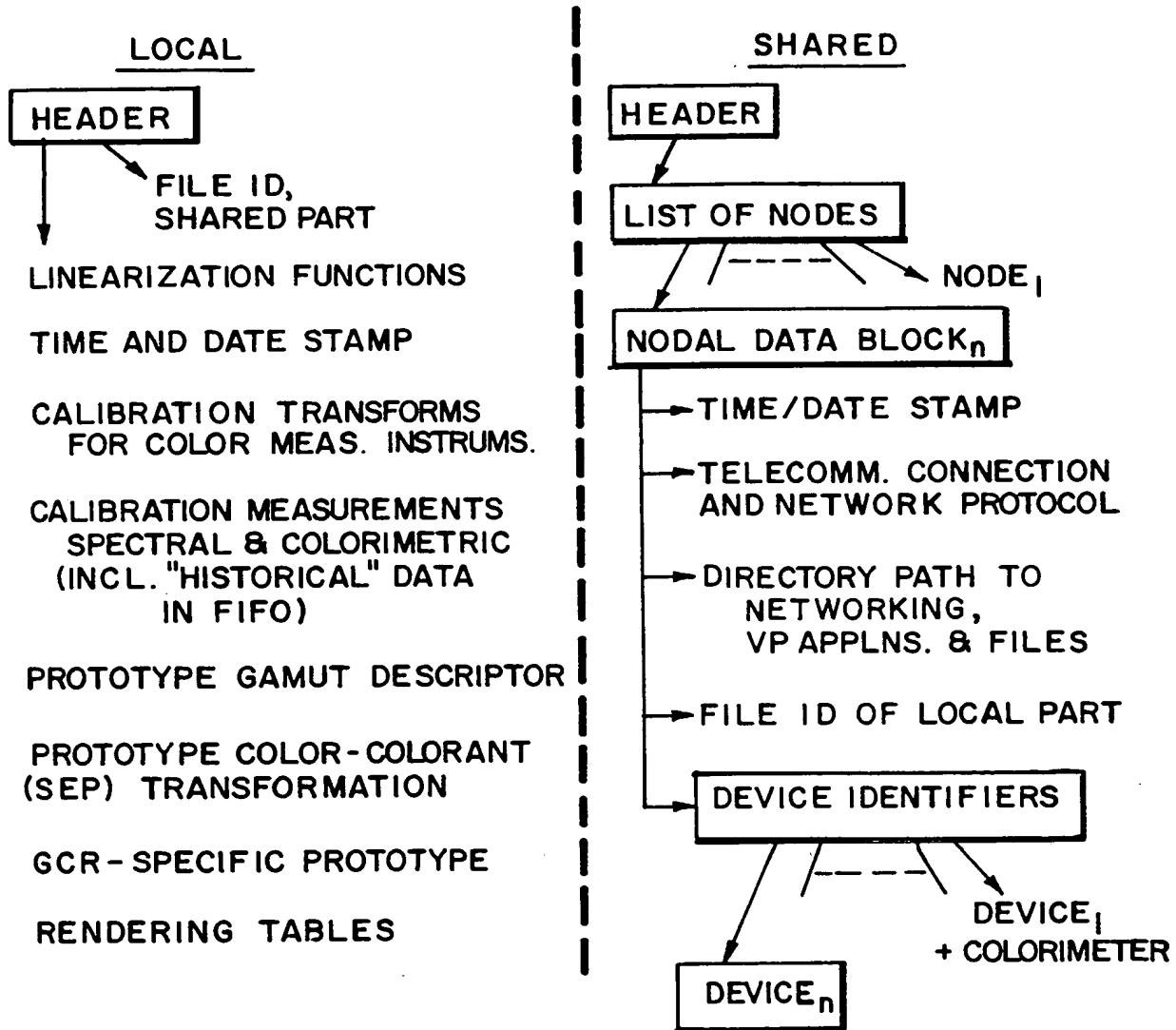


FIG. 15A

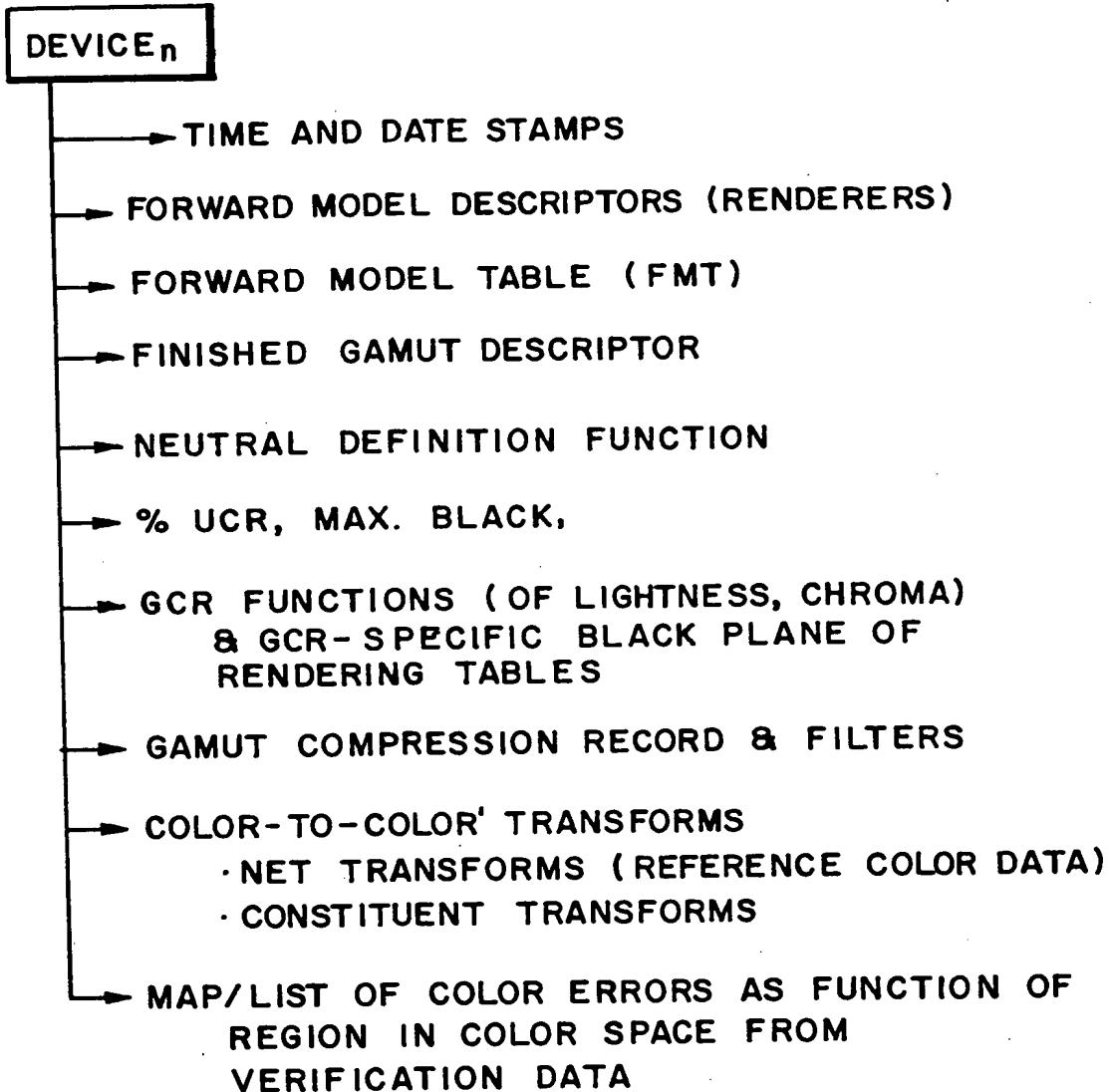
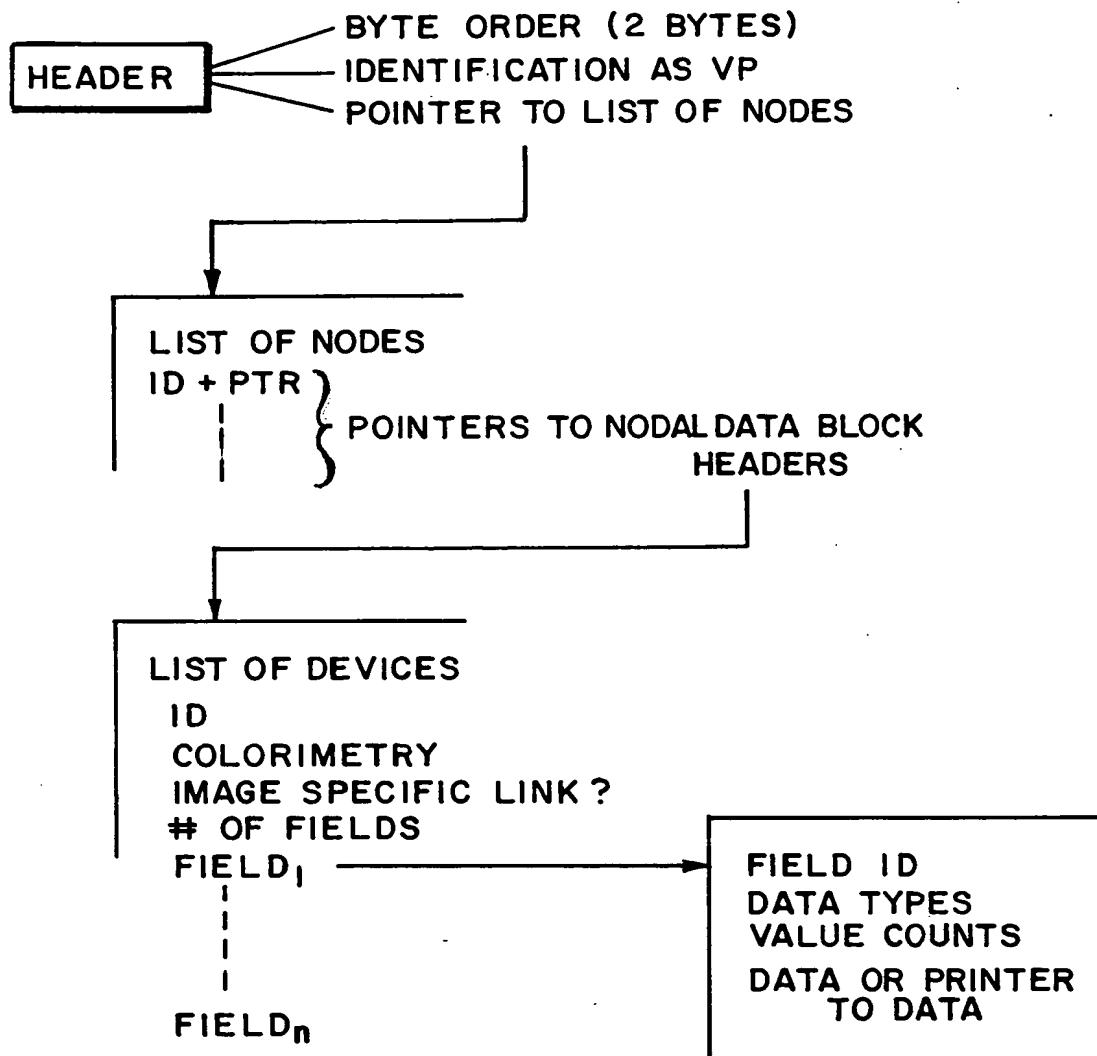
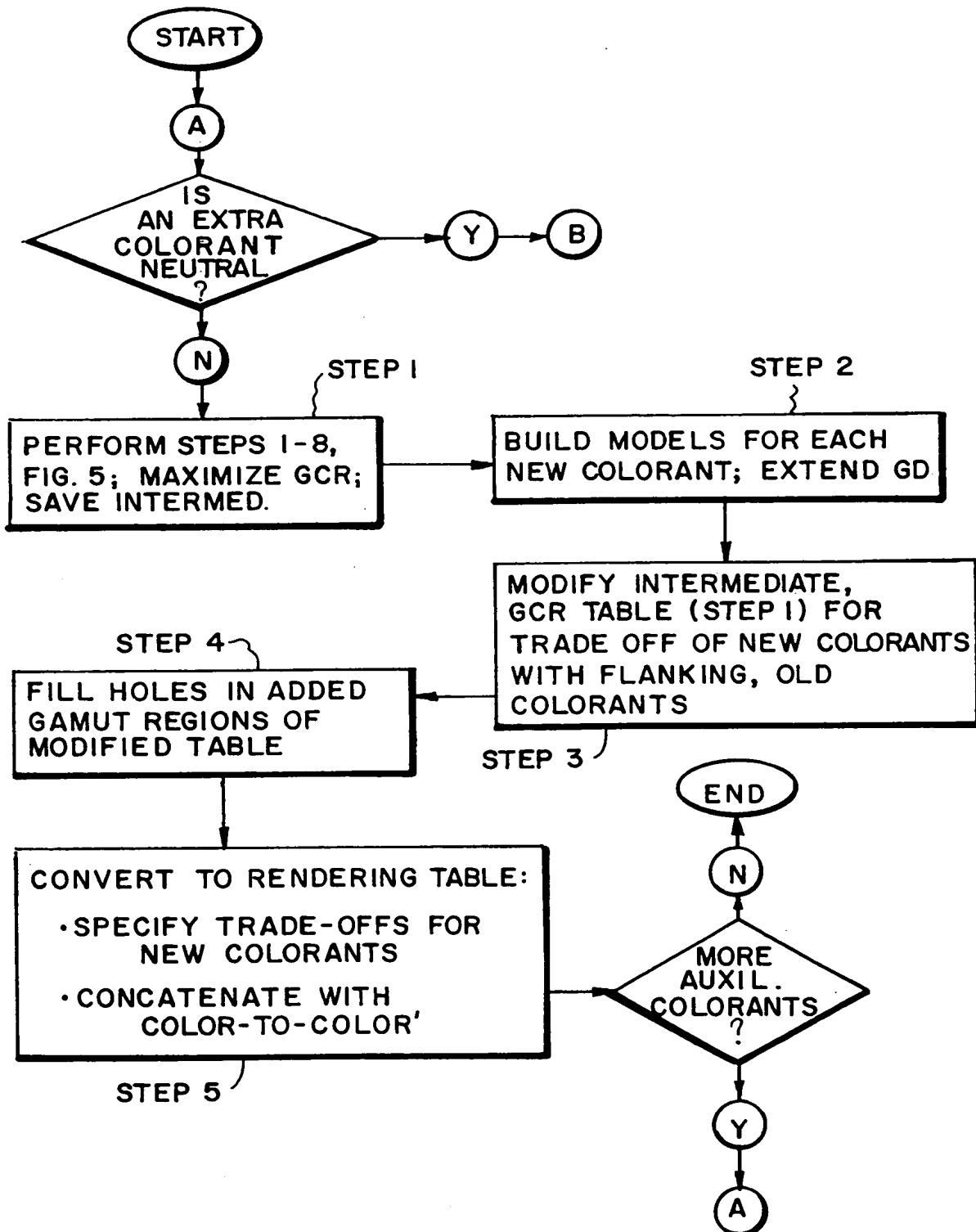
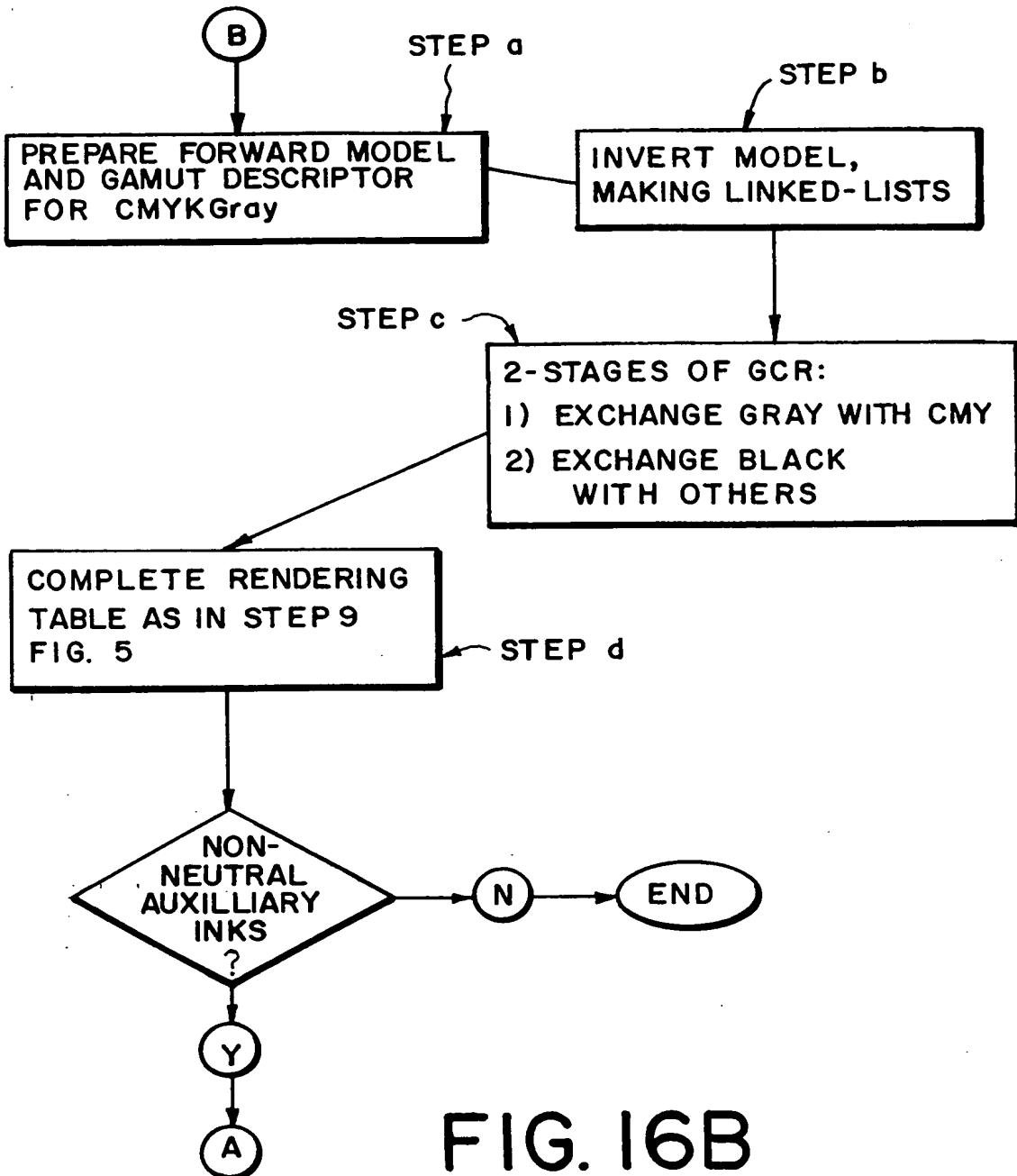
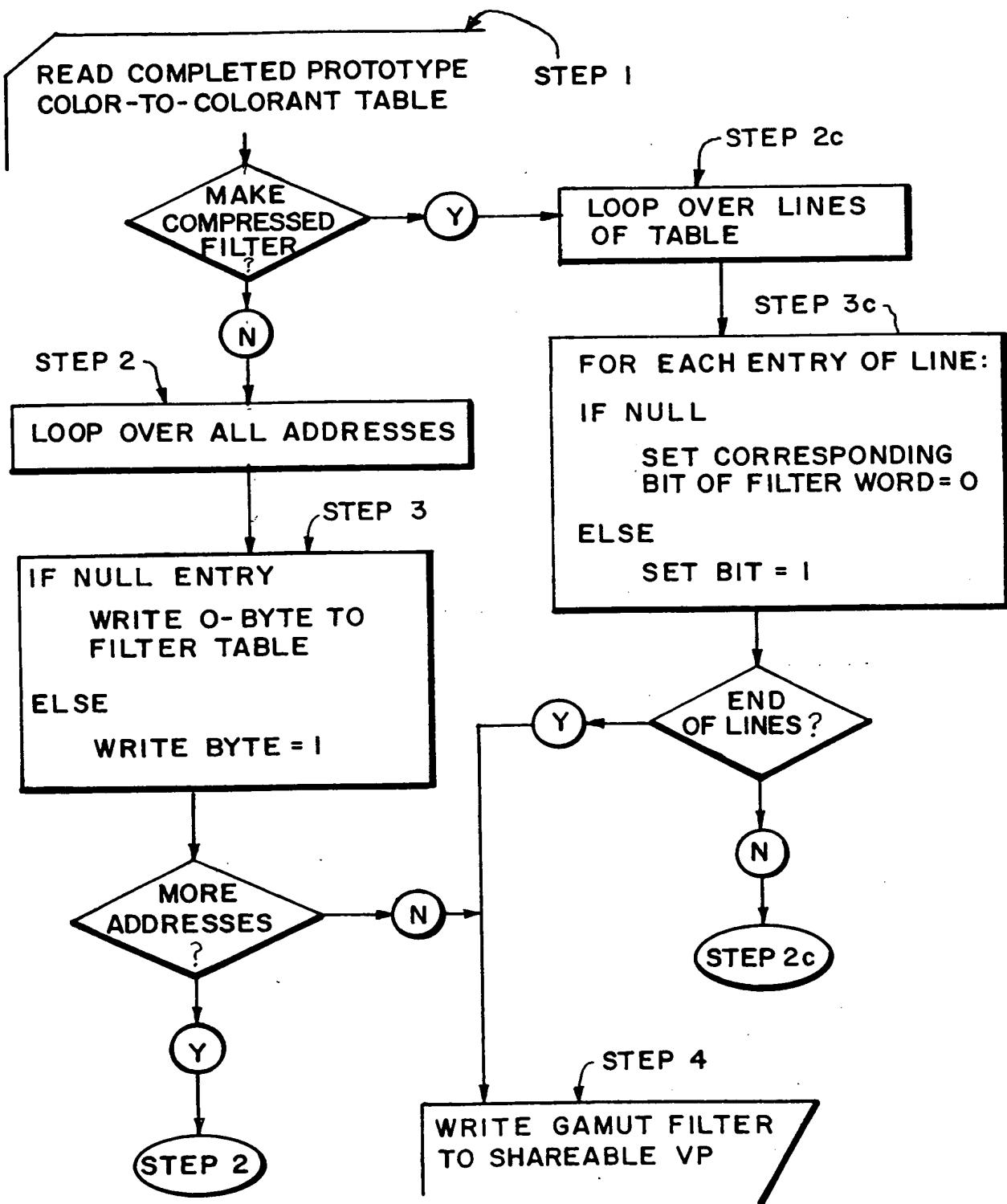


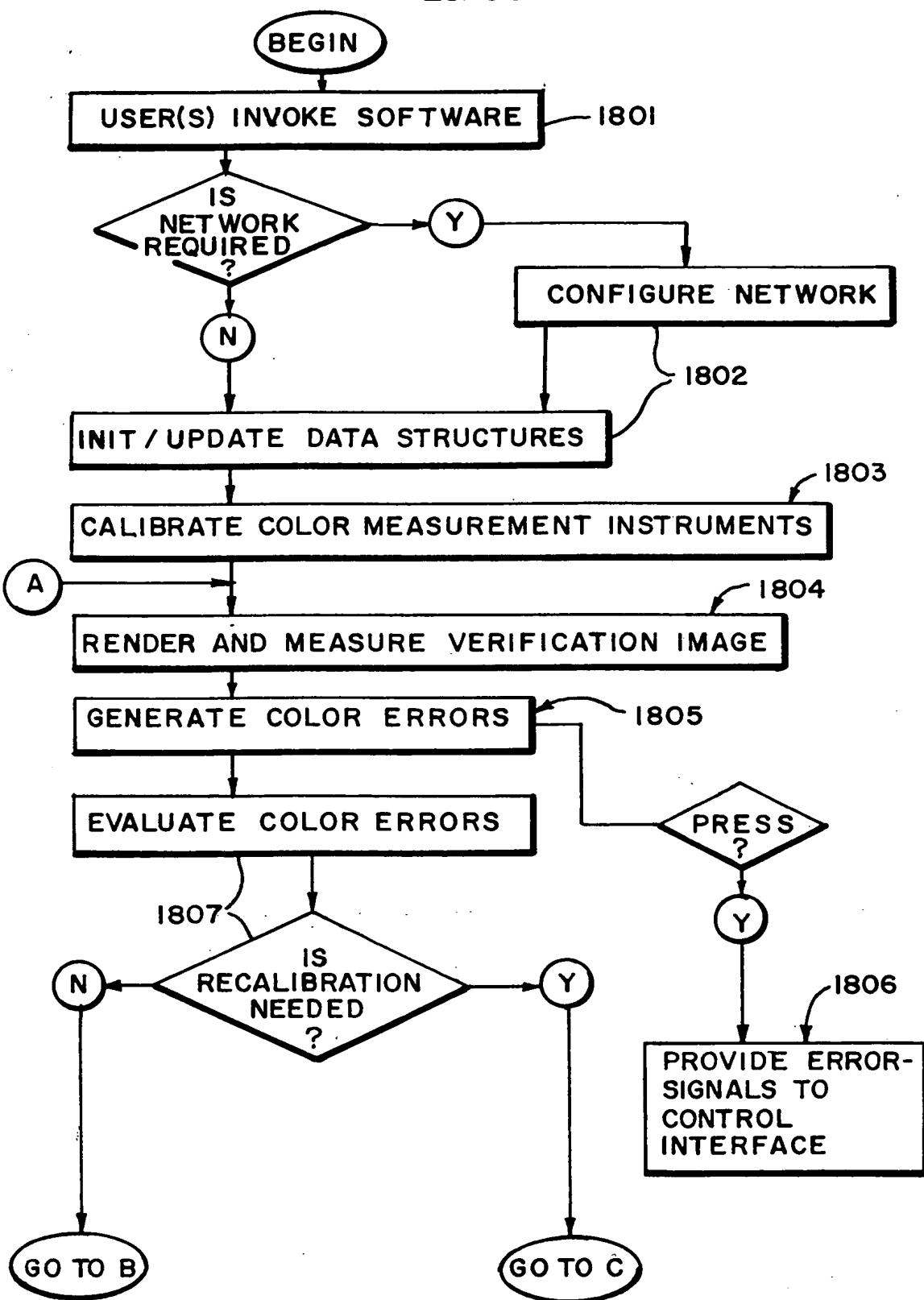
FIG. 15B

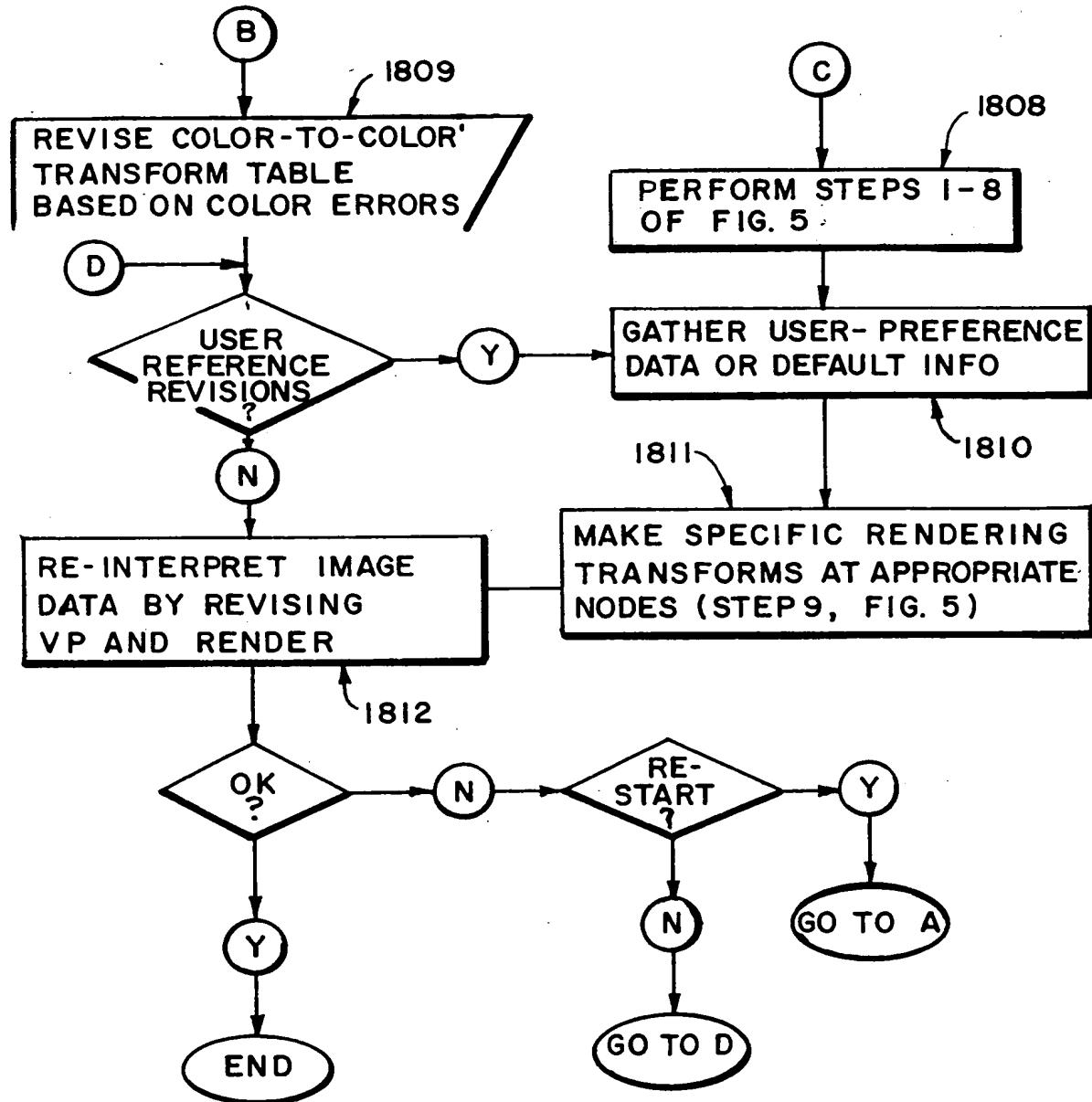
FIG. 15C

**FIG. 16A**

FIG. 16B

FIG.17

**FIG. 18A**

**FIG. 18B**

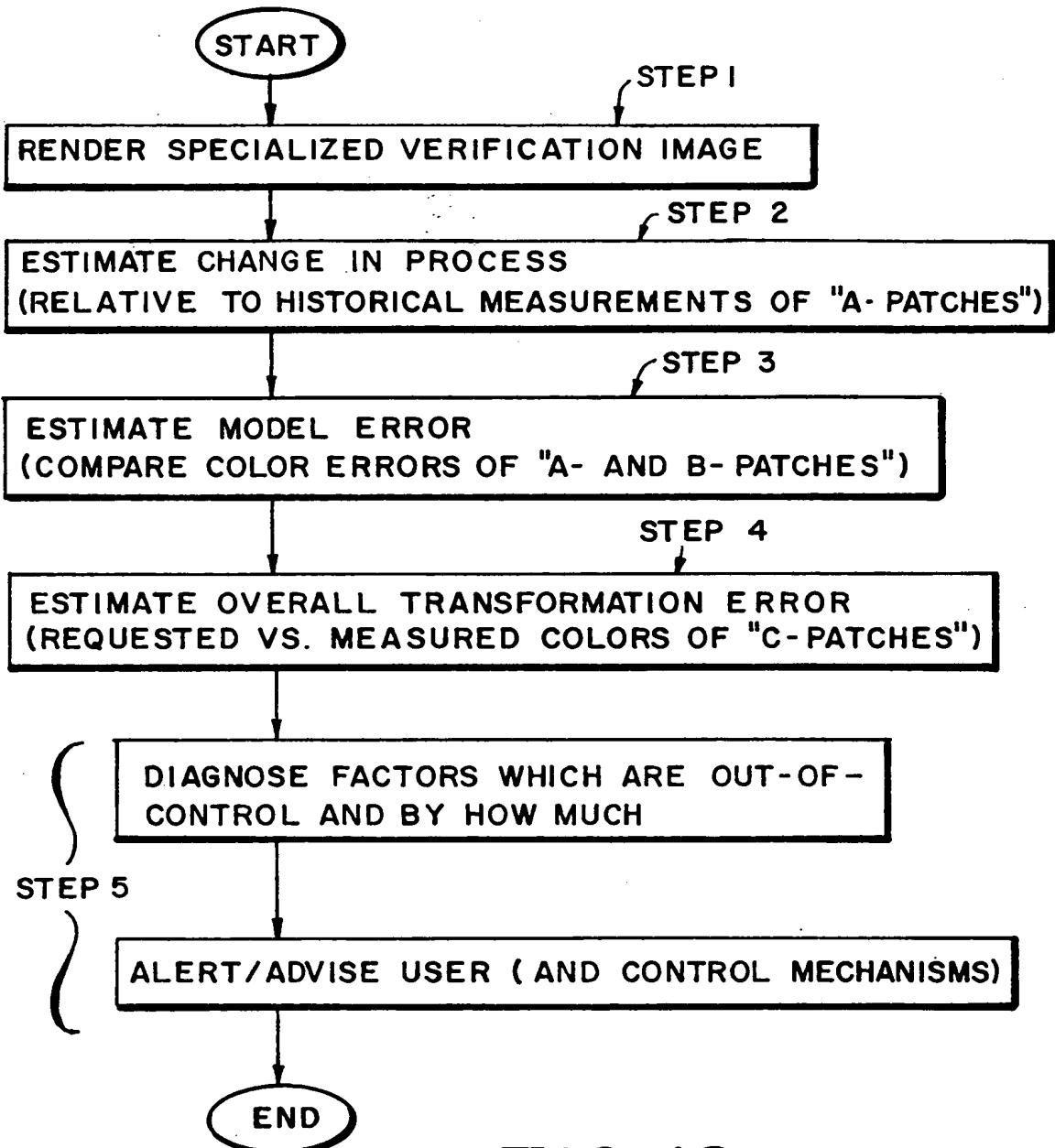


FIG. 19

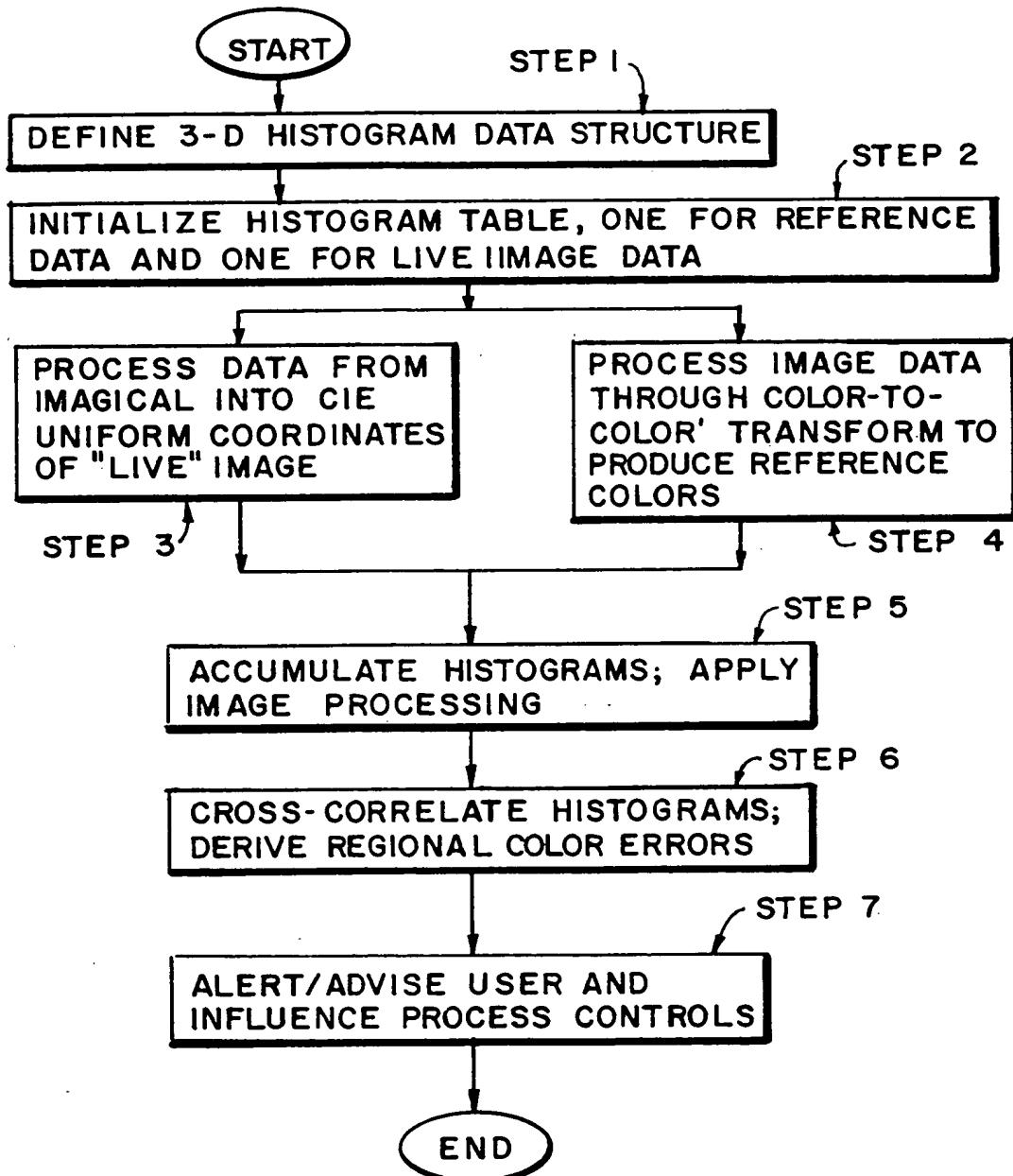


FIG. 20

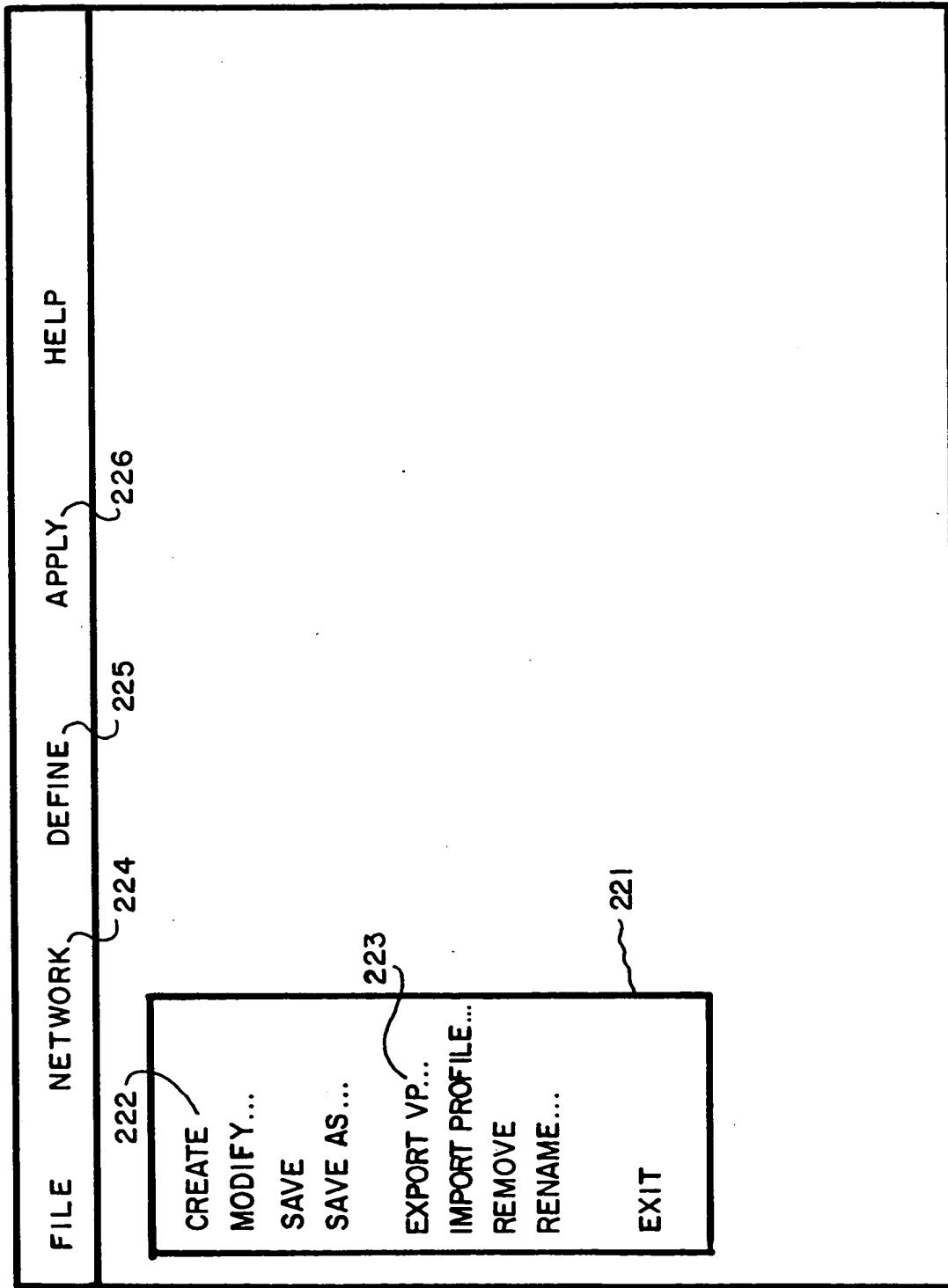
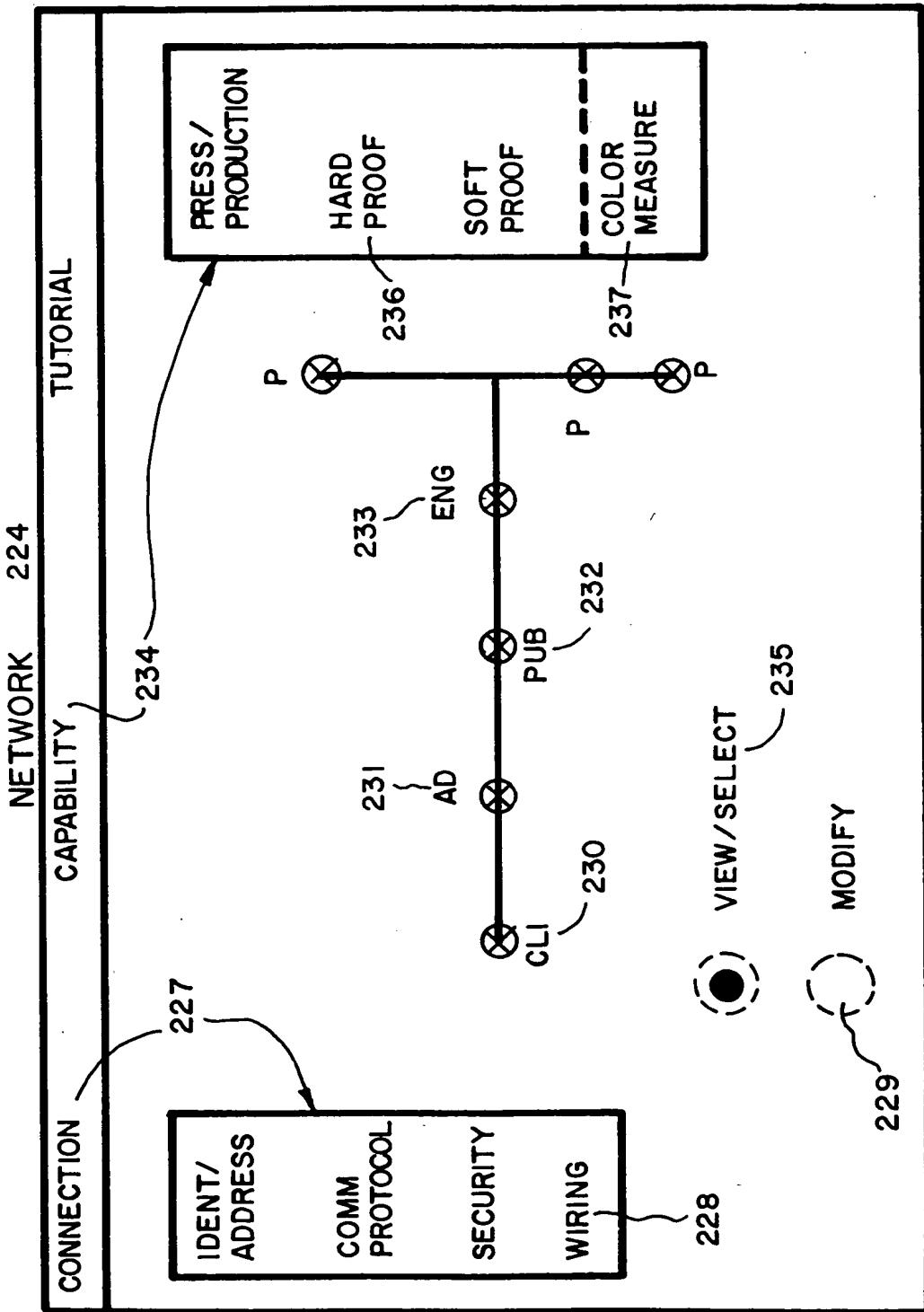


FIG. 2|A

**FIG. 2IB**

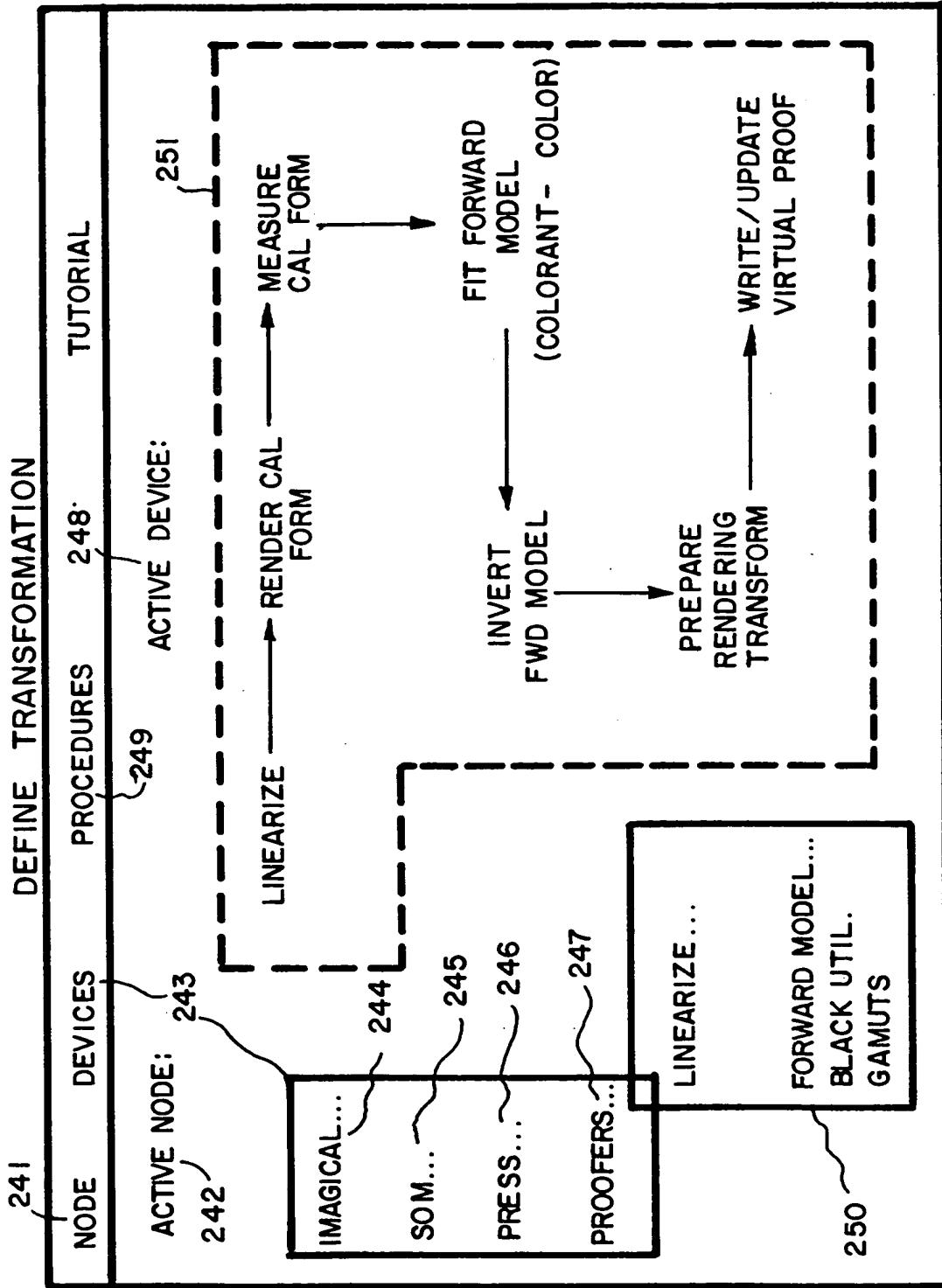
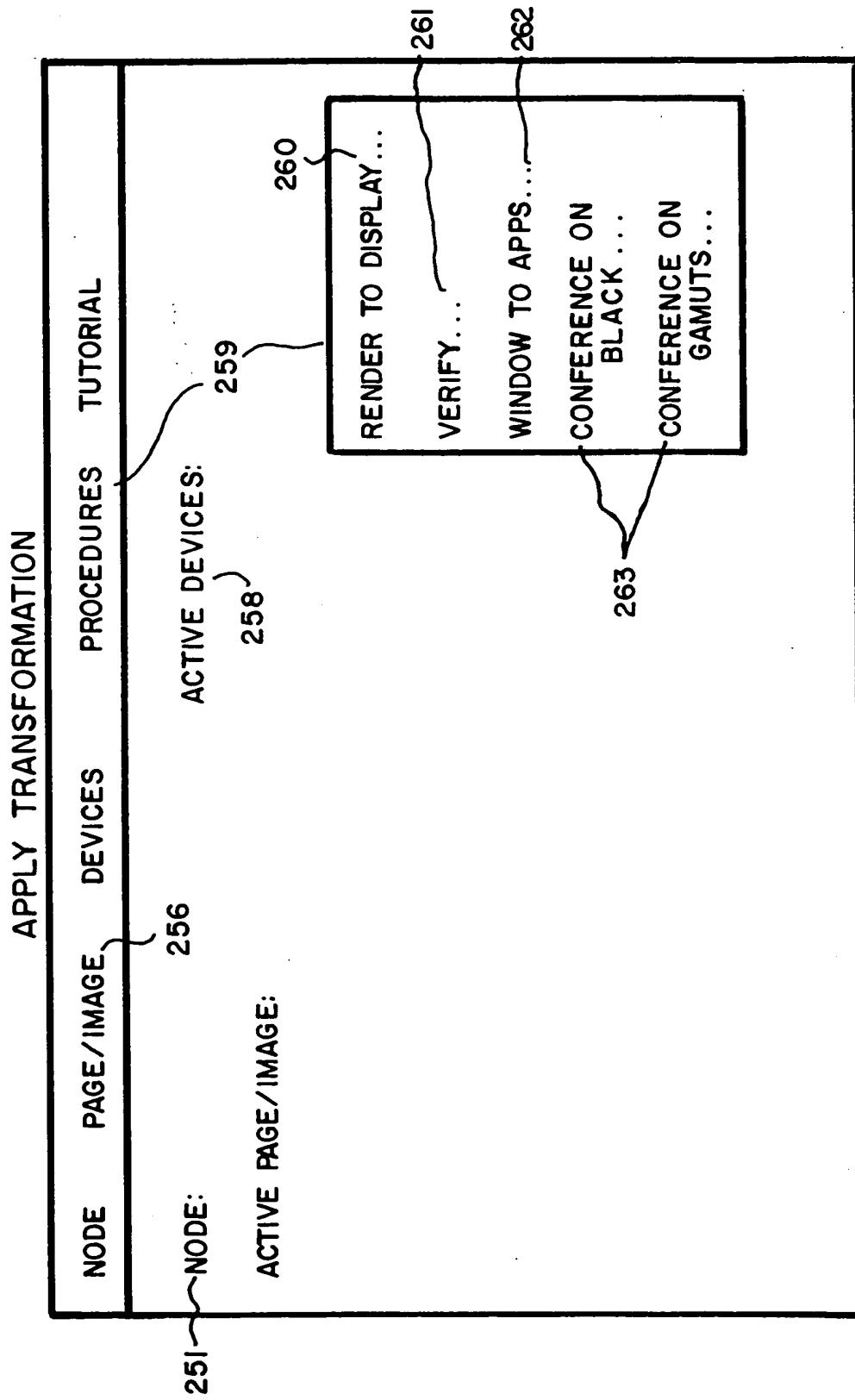
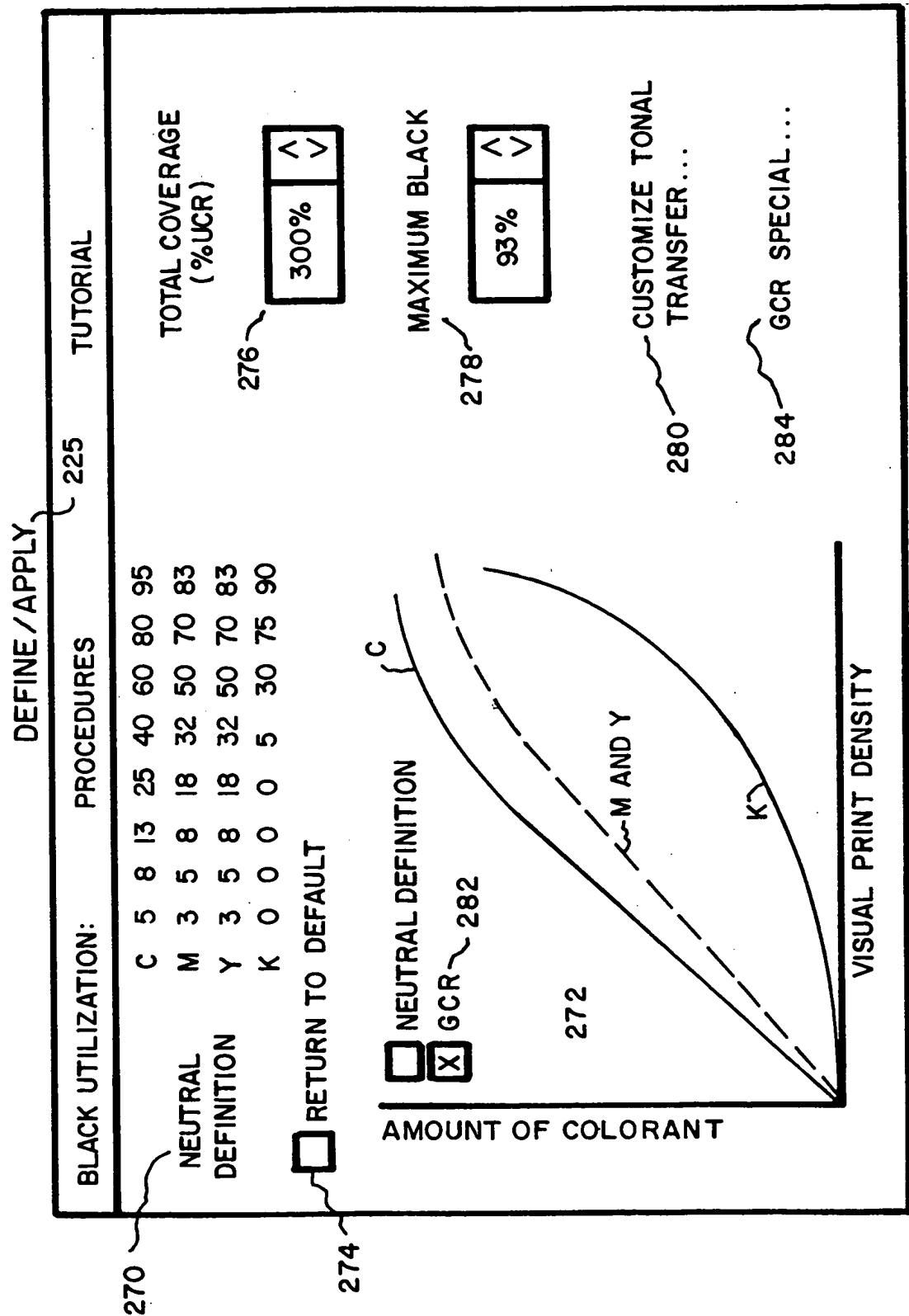
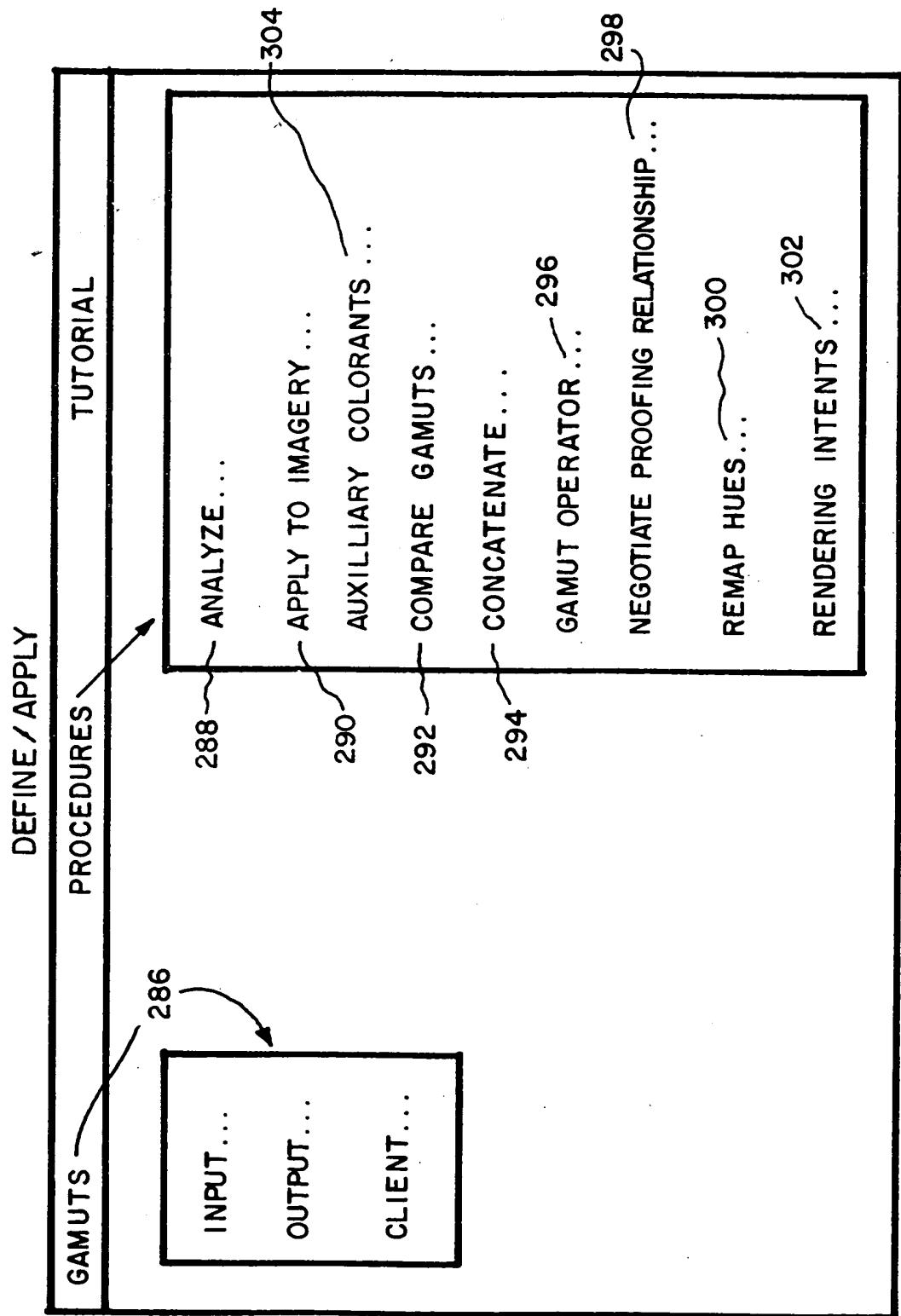


FIG. 21C

**FIG. 21D**



FIG. 21F